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THE

ZOOLOGICAL RECORD

VOLUME THE EIGHTY-FIRST

BEING THE

RECORDS OF ZOOLOGICAL LITERATURE

RELATING CHIEFLY TO THE YEAR

1944

COMPILED FOR THE ZOOLOGICAL SOCIETY OF LONDON BY

A. G. BRIGHTON, E. BROWNING, M. BURTON, F. C. FRASER, J. P. HARDING, A. B. HASTINGS, C. A. HOARE, THE LATE W. NICOLL, E. PRUDHOE, A. E. SALISBURY, J. K. S. ST. JOSEPH, M. A. SMITH, C. J. STUBBLEFIELD, W. P. C. TENISON, H. DIGHTON THOMAS, E. TREWAVAS, E. I. WHITE, AND THE IMPERIAL INSTITUTE OF ENTOMOLOGY.

EDITED BY

MALCOLM SMITH

Explorate solum : sic fit via certior ultra.

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PREFACE.

THIS Volume, the eighty-first, of the Zoological Record, deals mainly with the publications of 1944, but includes also those which, for various reasons, were not recorded in previous Volumes.

Articles in non-European languages, unless they are accompanied by an abstract in a European language, are not included. Articles and books which have not yet reached this country, but concerning which knowledge has been obtained from other sources, are recorded as far as the information permits. They will, if necessary, be dealt with more fully when they can be seen by the Recorders.

The total number of articles and books dealt with in this Volume is approximately 7,360.

MALCOLM SMITH,
Editor.

Papers and Memoïrs intended for this work should be addressed to "The Editor, Zoological Record, c/o British Museum (Natural History), Cromwell Road, London, S.W.7." It is requested that, in the case of separately printed copies of papers so forwarded, the original pagination should be indicated.

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I. COMPREHENSIVE ZOOLOGY

ARRANGED BY

J. P. HARDING, Ph.D.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are included in this division.

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1.—Opinion 4. The status of names published as manuscript names. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 1944 pp. 103–110.

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2. PROTOZOA

ARRANGED BY

CECIL A. HOARE, D.Sc.

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(d) Heliozoa.

[Vacant.]

(e) Radiolaria.

†*Acanthometron* (*Astrolithium*) *astraeforme* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Acanthosphaera* (*Rhaphidocapsa*) *barbati* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Bathropyramis* (*Acropyramis*) *woodringi* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Calocyclas* (*Calocycletta*) *hannai* **sp. n.**, *C.* (*C.*) *margatensis* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Cenosphaera* (*Circosphaera*) *jenkinsi* **sp. n.**; *C.* (*Phormosphaera*) *durhami* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Ceratospyris* (*Lophospyris*) *aguanegraensis* **sp. n.**, *C.* (*L.*) *laventaensis* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Clathrocyclas* (*Clathrocycloma*) *cabrilloensis* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Cornutella* (*Cornutissa*) *paloverdensis* **sp. n.**, *C.* (*C.*) *p.* **var. n.** *lata* Miocene California, CAMPBELL & CLARK **119.**

†*Cromydruppocarpus esterae* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Cromyosphaera* (?) *dubia* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Cromyostaurolonche cruciformis* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Dictyocephalus* (*Dictyocryphalus*) (?) *equiceps* **sp. n.**, *D.* (*Dictyoprora*) *miralestensis* **sp. n.**, *D.* (*D.*) *santaemonicae* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Dictyomitra* (*Dictyomitrella*) *ferminensis* **sp. n.**, *D.* (*Dictyomitroma*) *montereyana* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Eucyrtidium* (*Eucyrtis*) *delmontense* **sp. n.**, *E.* (*E.*) *d.* **var. n.** *inflatum*, Miocene California, CAMPBELL & CLARK **119.**

†*Eusyringium* (*Eusyringartus*) *vicentense* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Echinomma* (*Echinommura*) *hindei* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Gorgospyris* (*Thamnospyris*) (?) *perplexus* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Heliosoma* (*Heliosomantha*) *alveolatum* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Heliosphaera* (*Heliosphaerella*) *miocenica* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Hexacontium* (*Hexacontella*) *hootsi* **sp. n.** Miocene California, CAMPBELL & CLARK **119.**

†*Larnacantha polyacantha* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Lithocampe* (*Lithocampium*) *modeloensis* **sp.n.,** *L.* (*L.*) *m.* **var. n.** *longa*, Miocene California, Campbell & Clark **119.**

†*Lithomelissa* (*Sethomelissa*) *campanulaeformis* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Lithomitra* (*Lithomitrella*) *altamiraensis* **sp. n.,** *L.* (*Lithomitrissa*) *biconvexa* **sp. n.,** *L.* (*L.*) *bramlettei* **sp. n.,** *L.* (*L.*) *kleinpelli* **sp. n.,** *L.* (*L.*) *oxnardensis* **sp. n.,** *L.* (*L.*) *schencki* **sp. n.,** Miocene California, Campbell & Clark **119.**

†*Lithotractus* (*Lithotractara*) *santaeannae* **sp. n.,** *L.* (*L.*) *s.* **var. n.** *pusillus*, *L.* (*L.*) *timmsi* **sp. n.,** *L.* (*L.*) *t.* **var. n.** *quadrispinus* Miocene California, Campbell & Clark **119.**

†*Lychnocanium* (*Lychnocanella*) *grande* **sp. n.,** *L.* (*L.*) *g.* **var. n.** *brevis*, Miocene California, Campbell & Clark **119.**

†*Lychnodictyum* (?) *aberrans* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Ommatocampe* (*Ommatocampula*) *hughesi* **sp. n.,** Miocene California, Campbell & Clark **119.**

†*Pentaspyris* (?) *papillosa* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Perichlamydium scutaeforme* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Phorticium* (*Phortolarcus*) *regulare* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Plegmosphaera* (*Plegmosphaerusa*) *churchi* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Prunopyle titan* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Psilomelissa minuta* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Pterocorys* (*Pterocyrtidium*) *splendens* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Rhopalodictyum* (*Rhopalodictya*) *irvinense* **sp. n.,** *R.* (*R.*) *malagaense* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Sethoconus* (*Cornutellium*) *woodfordi* **sp. n.,** *S.* (*C.*) *w.* **var. n.** *advena*, *S.* (*Phlebarachnium*) *martini* **sp. n.** Miocene California Campbell & Clark **119.**

†*Siphocampe* (*Siphocampula*) *malagaensis* **sp. n.,** *S.* (*S.*) *reedi* **sp. n.,** *S.* (*S.*) *r.* **var. n.** *inflata*, Miocene California, Campbell & Clark **119.**

†*Spongasteriscus* (*Spongasterisculus*) *berminghami* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongatractus californicus* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongocore* (*Spongocorisca*) *lata* **sp. n.,** *S.* (*S.*) *puer* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongodiscus* (*Spongodisculus*) *gigas* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongolonche* (?) *kewe* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongostaurus stewarti* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Spongurus* (*Spongurantha*) *smithi* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Staurolonche* (*Staurolonchantha*) *aculeata* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Stomatodiscus newportensis* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Stylodictya* (*Stylodictyon*) *camerina* **sp. n.,** *S.* (*S.*) *heliozoides* **sp. n.,** *S.* (*S.*) *ornata* **sp. n.,** *S.* (*Stylospira*) *cornuspira* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Stylosphaera* (*Stylosphaerella*) *angelina* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Stylotrochus* (*Stylotrochiscus*) *sol* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Theocorys* (*Theocoronium*) *adamsi* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Theocyrtis* (*Theocorusca*) *redondoensis* **sp. n.** Miocene California, Campbell & Clark **119.**

†*Triceraspyris* (*Triospyrium* ?) *pacifica* **sp. n.** Miocene California, CAMPBELL & CLARK **119**.

†*Tricolocampe* (*Tricolocamptra*) *sanpedroana* **sp. n.** Miocene California, CAMPBELL & CLARK **119**.

†*Tripophaenoscenium laimingi* **sp. n.** Miocene California, CAMPBELL & CLARK **119**.

†*Tristylospyris* (*Tristylospyrula*) *balboaensis* **sp. n.**, *T.* (*T.*) *herdisae* **sp. n.**, *T.* (*T.*) *lagunaensis* **sp. n.**, *T.* (*T.*) *lunadae* **sp. n.** Miocene California, CAMPBELL & CLARK **119**.

3.—MASTIGOPHORA.

A. PHYTOMASTIGINA.

(a) Chrysomonadida.

Fossil Silicoflagellates from Chile, FRENGUELLI **251**.

†*Dictyocha glabra* **sp. n.** from Miocene of Chile, FRENGUELLI **251**.

(b) Cryptomonadida.

[Vacant.]

(c) Dinoflagellata.

[Vacant.]

(d) Euglenoidida.

Euglena : key to spp. of N. America ; *Euglena fronsundulata* **sp. n.**, *E. trisulcata* **sp. n.**, *E. antefossa* **sp. n.**, *E. ignobilis* **sp. n.**, *E. rostrifera* **sp. n.**, *E. nana* **sp. n.**, *E. retronata* **sp. n.**, *E. fundoversata* **sp. n.**, *E. acus* **var. n.** *angularis* from Iowa, U.S.A., JOHNSON **352**.

(e) Phytomonadida.

[Vacant.]

B.—ZOOMASTIGINA.

f) Protomonadida.

Eutrichomastix : parasite-host list of spp., MORGAN **472**.

Foaina : key to spp. ; *F. grassii* **comb. n.** (for *Janickiella grassii* D. & G., 1923) ; *F. solita* **sp. n.**, *F. parvula* **sp. n.**, *F. humilis* **sp. n.**, *F. exempta* **sp. n.**, *F. ovata* **sp. n.**, *F. taeniola* **sp. n.**, *F. nana* **comb. n.** (for *Paradevescovina nana* K., 1926) ; *F. costata* **sp. n.** ; *F. dogieli* **comb. n.** (for *Trichomonas dogieli* D. & G., 1923) ; *F. hamata* **sp. n.**, *F. minuscula* **sp. n.**, *F. acanthophora* **sp. n.**, *F. signata* **sp. n.**, *F. falcifera* **sp. n.**, *F. funifera* **sp. n.**, *F. reflexa* **sp. n.**, *F. appendicula* **sp. n.**, *F. duo* **sp. n.**, *F. nucleoflexa* **sp. n.**, *F. ramulosa* **sp. n.**, *F. pectinata* **sp. n.**, from termites, KIRBY **374**.

Leishmania chagasi declared to be a synonym of *L. donovani*, SENEKJIE **616**.

Pentatrichomonas alleni **sp. n.** from Himalayan crow, *Corvus corax tibetanus*, RAY & SAPRE **557**.

Retortamonas wenrichi **sp. n.** from mole-cricket, *Gryllotalpa hexadactyla*, N. America, STABLER **650**.

Tetratrichomastix hegneri **sp. n.** from Indian frog, *Rana limnocharis*, MISRA **462**.

Trichomonas spp. parasitic in man : comparative morphology and systematic position, WENRICH **712**.

Trichomonas see *Pentatrichomonas*.

Trypanosoma grylli **sp. n.** from N. American amphibian, *Acris gryllus*, NIGRELLI **497**.

(g) Hypermastigida.

Trichonympha divexa **sp. n.**, *T. ampla* **sp. n.**, *T. corbula* **sp. n.**, *T. teres* **sp. n.**, *T. peplophora* **sp. n.** from Kalotermitid termites, KIRBY **376**.

(h) Diplomonadida.

Giardia beltrani **sp. n.** from sparrow, *Passer domesticus* ; including list of *Giardia* spp. described from birds, Mexico, LARENAS **393**.—*G. sanguinis* (Gonder, 1911) : the host, *Elanus coeruleus*, which has been mis-named a "falcon," is actually a kite, STABLER **651**.

(i) Polymonadida.

Barroella **gen. n.** (**nom. n.** for *Kirbyella* Zeliff, 1930, preoccupied by genus of insects), ZELIFF **744**.

Kirbyella changed to *Barroella* (q. v.).

4.—SPOROZOA.

A. COCCIDIOMORPHA.

(a) Gregarinida.

Stylocephalus bahli **sp. n.** from beetle, *Gonocephalum helopioides*, India, MISRA **460**.

(b) Coccidiida.

Dorisiella hareni **sp. n.** from Indian bird, *Munia malacca*, CHAKRAVARTY & KAR **130**.

Eimeria innominata **sp. n.**, *E. irregularis* **sp. n.**, from Indian turtle, KAR **359**.—*E. notopteri* **sp. n.** from Indian fish, *Notopterus*, CHAKRAVARTY & KAR **128**.—*E. brevoortiana* **sp. n.** from marine fish, *Brevoortiana tyrannus*, N. America, HARDCASTLE **298**.—*E. himalayanum* **sp. n.**, from Indian toad, RAY & MISRA **552**.—*E. minetti* **sp. n.**, from Indian lizard, *Mabuia* sp., RAY, RAGHAVACHARI & SAPRE **556**.

Isospora ginginiana **sp. n.**, *I. muniae* **sp. n.**, *I. temenuchii* **sp. n.** from Indian birds, CHAKRAVARTY & KAR **130**.—*I. hominis*: record of a case from N. Africa, distinct from *I. belli* Wenyon, HERRLICH & LIEBMANN **317**.

Myriospora gopalai **sp. n.** from polychaete, *Cirratulus filiformis*, Coast of India, GANAPATI **261**.

Octosporella **gen. n.** *mabuiae* **sp. n.** from Indian lizard, *Mabuia* sp., RAY & RAGHAVACHARI **555**.

(c) Haemosporidia.

Haemoproteus handai **sp. n.**, from Indian parakeet, *Psitticula cyanocephala*, MAQSOOD **437**.

Plasmodium: nomenclature of human malaria parasites, HEMMING **314**, **315**; SABROSKY & USINGER **586**; BELTRÁN **79**.—*Plasmodium rhadinarum* **sp. n.**, *P. floridense* **sp. n.** from American lizards, *Iguana iguana* and *Sceloporus undulatus* respectively, THOMPSON & HUFF **671**.—*P. mexicanum* **sp. n.** from Mexican lizard, *Sceloporus ferrariperezi*, THOMPSON & HUFF **670**.—*P. relictum* **var. n.** *spheniscidae* from penguins' Antarctic region, FANTHAM & PORTER **227**.—*P. gallinaceum*: development from sporozite to trophozoite, HUFF & COULSTON **334**.

B. CNIDOSPORIDIA.

(d) Myxosporidia.

Henneguya magna **sp. n.** from fish *Lepibema chrysops* N. America, RICE & JAHN **567**.

Myxidium melum **sp. n.** from fishes, N. America, OTTO & JAHN **507**.

Myxobolus symmetricus **sp. n.** from fish N. America, RICE & JAHN **567**.—*M. bubalis* **sp. n.**, *M. sparoides* **sp. n.**, *M. okobojiensis* **sp. n.**, *M. iowensis* **sp. n.** from fishes, N. America, OTTO & JAHN **507**.

Myxosoma okobojiensis **sp. n.** from fish *Ictiobus bubalis* N. America, RICE & JAHN **567**.

(e) Microsporidia.

Plistophora kudoi **sp. n.** from cockroach, *Blatta orientalis* U.S.A., SPRAGUE & RAMSEY **649**.

Thelohania anomala **sp. n.** from Indian mosquitos, *Anopheles* spp., SEN **614**.

(f) Actinomyxidia.

[Vacant.]

(g) Sarcosporidia.

Sarcocystis lacertae utae **subsp. n.**, *S. platydactyli sceleropi* **subsp. n.** from California lizards, BALL **52**.

(h) Haplosporidia.

Caryoletira **gen. n.** *anulata* **sp. n.** (type), *C. magna* **sp. n.**, hyperparasitic in *Trichonympha* spp. (ex termites), KIRBY **376**.

Urosporidium charletyi **sp. n.**, hyperparasitic in *Catenotaenia dendritica* (parasite of squirrel *Sciurus vulgaris*), France, DOLLFUS **205**.

5.—CILIOPHORA.

A. OPALINATA.

[Vacant.]

B. CILIATA.

(a) Holotrichida.

Chilodonella (see *Euodon*).

Euodon (= *Chilodonella*) *siegelae* **sp. n.**, ectocommensal on oligochaete, *Aelosoma headleyi*, Brazil, MARCUS **438**.

(b) Heterotrichida.

Folliculinidae: classification and bionomics, ANDREWS **36**.

(c) Oligotrichida.

[Vacant.]

(d) Entodiniomorpha.

[Vacant.]

(e) Hypotrichida.

[Vacant.]

(f) Peritrichida.

Ophrydium ectatum **sp. n.** from N. America, MAST **445**.

C. SUCTORIA.

[Vacant.]

3. PORIFERA

BY

M. BURTON, D.Sc.

I.—TITLES

1.—Opinion 1. The meaning of the word "indication" in proviso (*a*) to Article 25 of the International Code, as respects names published on, or before, 31st December, 1930. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 10 1944 pp. 73–86.

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4.—Opinion 4. The status of names published as manuscript names. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 13 1944 pp. 103–114.

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Miller, O. *see* Leloup, E.

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†*Corynella* ? *aguilerae* **sp. n.** Cretaceous Venezuela, Wells J. Paleont. Menasha Wis. **18** (5) 1944 p. 444 pl. lxxv figs. 1–2.

†*Cotyliscus* **gen. n.** p. 34, *ewersi* **sp. n.** Carboniferous U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 35 pl. iii figs. 2–3.

†*Cystauletes* **gen. n.** p. 31, *mammillosus* **sp. n.** Carboniferous U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 32 pl. i figs. 3–5.

†*Elasmojerea macrophtalma* p. 59 pl. ii figs. 5–6, *arnaudi* p. 60 pl. ii fig. 4 **spp. n.** Cretaceous France, Lachasse Bull. Soc. géol. Fr. (5) **13** (1–3) 1943.

†*Girtyocoelia dunbari* **sp. n.** Permian U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 33 pl. iii fig. 6.

†*Guadalupia williamsi* **sp. n.** Permian U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 23 pl. ii fig. 10, pl. iii figs. 7, 11.

†*Polyphymaspongia* **gen. n.** p. 24, *explanata* sp. n. Permian U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 25 pl. i fig. 8 text-fig. 2.

†*Sphaerospongia tessellata* notes, Warren **33**.

Sycon ciliatum, coronatum, development, Duboscq & Tuzet **17** ; *S. elegans* development, Duboscq & Tuzet **19**.

†*Talpaspongia* **gen. n.** p. 28, *clavata* **sp. n.** Permian U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 29 pl. i fig. 6, pl. iii figs. 1, 8.

†*Wewokella contorta* **sp. n.** Carboniferous U.S.A., King Bull. Geol. Surv. Kansas **47** (1) 1943 p. 27 pl. ii figs. 1, 8, pl. iii fig. 5.

"FRESHWATER."

Ephydatia fluviatilis formation of inhalant orifices, Brien **14**.

Spongilla lacustris formation of inhalant orifices, Brien **14**.

HEXACTINELLIDA.

†*Rhizocheton* **gen. n.** p. 53, *jacobi* p. 55 pl. i figs. 5–6 pl. ii fig. 1 text-figs 8–9, *cylindricum* p. 56 pl. ii fig. 2, *arnaudi* p. 56 pl. ii fig. 3, **spp. n.** Cretaceous France, Lachasse Bull. Soc. géol. Fr. (5) **13** (1–3) 1943.

†*Rhizopoterionopsis* **gen. n.** p. 51, *caillauensis* **sp. n.** Cretaceous France, LACHASSE Bull. Soc. géol. Fr. (5) **13** (1–3) 1943 p. 52 pl. i figs. 2–4.

TETRAXONIDA.

(i) HOMOSCLEROPHORA.

Oscarella notes, TOPSENT **30.**

(ii) STREPTASTROSCLEROPHORA.

(Vacant.)

(iii) ASTROSCLEROPHORA.

†*Astraeospongia ohioensis* **sp. n.** Devonian U.S.A., WELLS Proc. roy. Soc. Vict. **56** (2) 1945 p. 210 figs. 1–4.

(iv) LITHISTIDA.

†*Defordia* **gen. n.** p. 16, *defuncta* **sp. n.** Permian U.S.A., KING Bull. Geol. Surv. Kansas **47** (1) 1943 p. 17 pl. i fig. 7, pl. ii fig. 9, pl. iii fig. 9.

†*Heliospongia vokesi* **sp. n.** Permian U.S.A., KING Bull. Geol. Surv. Kansas **47** (1) 1943 p. 8 pl. i fig. 1–2 text-fig. 1.

†*Laubenfelsia* **gen. n.** p. 9, *regularis* **sp. n.** Permian U.S.A., KING Bull. Geol. Surv. Kansas **47** (1) 1943 p. 10 pl. ii figs. 3–5.

†*Leptodiscus corrugatus* figd., WILLIAMS **36.**

†*Pseudojerea asteriensis* **sp. n.** Cretaceous France, LACHASSE Bull. Soc. géol. Fr. (5) **13** (1–3) 1943 p. 46 pl. i fig. 1 text-figs. 1–7.

†*Pseudopemmatites* **gen. n.** p. 12, *skinneri* **sp. n.** Permian U.S.A., KING Bull. Geol. Surv. Kansas **47** (1) 1943 p. 16 pl. iii figs. 10, 12.

†*Stylopegma* **gen. n.** p. 19, *dulce* p. 19 pl. ii figs. 6–7 pl. iii fig. 4; *conica* p. 20 pl. ii fig. 2 **spp. n.** Permian U.S.A., KING Bull. Geol. Surv. Kansas **47** (1) 1943.

(v) SIGMATOSCLEROPHORA.

(Vacant.)

KERATOSA.

Halisarca notes, TOPSENT **30.**

†CYATHOSPONGIA.

†*Archaeocyathus* (=*Spirocyathus*) *hupehensis* **sp. n.** Cambrian China, CHI Bull. Geol. Soc. China **20** (2) 1940 p. 132 pl. i figs. 3–4.

†*Cambrocyathus* (=*Archaeocyathus*) *biseriatus* **sp. n.** Cambrian China, CHI Bull. Geol. Soc. China **20** (2) 1940 p. 131 fig. 1.

4. COELENTERATA

ARRANGED BY

H. DIGHTON THOMAS, M.A., Ph.D.

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†*Actinaraea arborescens* p. 440 fig., WELLS **167.**

Actinicorallia **nom. n.** (Class), SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 98].

Aiptasia insignis **sp. n.** p. 9 fig. St. Helena, CARLGREN Vidensk. Medd. naturf. Foren. Kjøb. **105** 1941.

Amphianthus sanctae helenae p. 10 fig., *A.* (*Stephanauge* ?) *giganteus* p. 12 fig., **spp. n.** St. Helena, CARLGREN Vidensk. Medd. naturf. Foren. Kjøb. **105** 1941.

†*Amplexi-Zaphrentis* discussed p. 37, EASTON **34.**

†*Amplexus* discussed p. 48, *rockfordensis* pp. 41, 48 fig., EASTON **34.**—*A.* ? sp. ind. p. 13 fig., REGNÉLL **122.**

Anactinia pelagica larva p. 133 fig., NAIR **105.**

Anthopleura mortensenii p. 3 fig., *sanctae helenae* p. 4 fig., **spp. n.** St. Helena, CARLGREN Vidensk. Medd. naturf. Foren. Kjøb. **105** 1941.

Anthothoë stimpsoni p. 16 fig., CARLGREN **17.**

Apiactis tentaculata **sp. n.** p. 8 fig. Brazil, LELOUP Bull. Mus. roy. Hist. nat. Belgique **18** 34 1942.—*A. bengalensis* larva p. 132 fig., NAIR **105.**

†*Aplosmilia* ? *tolmachoffana* a species of *Elasmophyllia* p. 442, WELLS **167.**

Arachnactis albida p. 2, LELOUP **85.**

Astrangia astraeiformis p. 15 fig., *mercatoris* **sp. n.** p. 16 fig. W. Africa, THIEL Mém. Mus. roy. Hist. nat. Belgique (2) **21** 1941.

Astreopora [sic] *myriophthalma* p. 302, UMBGROVE **157.**

†*Astrocoenia barranquinensis* **sp. n.** p. 432 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Balanophyllia* cf. *variabilis* p. 1 fig., *blakeleyensis* p. 2 fig., WEAVER **164.**

†*Bothrophyllum* discussed p. 122, *B.* ? *kansasense* p. 123 fig., EASTON **33.**

†*Budaia felixi* **sp. n.** p. 442 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Calamophyllia sandbergeri* p. 438 fig., WELLS **167.**

†*Campophyllum* discussed p. 119, *kansasense* transferred to *Bothrophyllum*? p. 123, *nevadense* to *Caninia* p. 124, *gasperense* to *Caninia veryi* p. 128, *torquium* to *Caninia* p. 125, *C.* ? *readi* to *Caninophyllum* ? p. 130, EASTON **33.**

†*Caninia* discussed p. 123, *nevadensis* p. 124 fig., *torquia* p. 125 fig., *veryi* p. 128 fig., EASTON **33.**—*C. corniculum* p. 49 fig., EASTON **34.**

†*Caninophyllum* ? *readi* p. 130 fig., EASTON **33.**

†*Caryophyllia* sp. cf. *cyathus* p. 32 fig., UMBGROVE **158.**—*C. clavus* p. 445 fig., WELLS **167.**

†*Chonophyllum sedaliense* designated genotype of *Vesiculophyllum* p. 52, EASTON **34.**

Cladocora arbuscula p. 14, THIEL **150.**

†*Cladophyllia stewartae* **sp. n.** p. 442 fig., Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Clinophyllum* discussed p. 47, *chouteauense* p. 47 fig., *excavatum* **sp. n.** p. 47 fig. Lower Carboniferous Missouri, EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

Coeloria rustica p. 282 fig., *astraeiformis* and *astraeiformis*→ *rustica* p. 283 fig., UMBGROVE **157.**

†*Coeloria daedalea* p. 36 fig., *lamellina* p. 36 fig., UMBGROVE **158.**

Coeloseris mayeri p. 302, UMBGROVE **157.**

†*Coleophyllum* ? *greeni* p. 62 fig., EASTON **34.**

†*Confusastraraea obsoleta* p. 398 fig., UMBGROVE **160.**

†*Corwenia rugosa* p. 96 fig., *chutsingensis, chiuyaoshanensis, parachihsianensis, lipoensis* referred to *Heritschia* p. 97, *densicolumella* and cf. *lipoensis* referred to ?*Heritschia* p. 97, MOORE & JEFFORDS **100**.—*C. hasimotoi* **sp. n.** p. 101 fig. Upper Palaeozoic Japan, NAGAO & MINATO J. Hokkaido Imp. Univ. Fac. Sci. (4) Geol. Min. Sapporo **6** (2) 1941.

Coscinaraea discussed p. 300, *acuticarinata* **sp. n.** p. 301 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

†*Cyathaxonia arcuatus* p. 30, *tantilla* p. 30 fig., EASTON **34**.

†*Cyathophora haysensis* p. 433 fig., *hedbergi* **sp. n.** p. 434 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Cyathophyllum glabrum* transferred to *Koninckophyllum* p. 51 fig., EASTON **34**.—*C.* see Gen. et sp. ind.

†*Cyathopsis* a synonym of *Caninia* p. 121, EASTON **33**.

Cyclocorallia **nom. n.** *pro* Hexacorallia (with Heterocorallia), SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin. **18** (4) (1) 1943 p. 98].

†*Cypellophyllum* **nom. n.** pro *Craterophyllum* Tolmachoff (non Foerste) p. 287, Carboniferous Russia, TOLMACHOFF Geol. Mag. London **70** 1933.

Cyphastrea [sic] *microphthalma, chalcidicum* p. 276, UMBGROVE **157**.

†*Cyphastrea* [sic] *seraila* p. 33 fig., UMBGROVE **158**.

†*Cystiphyllum cylindricum* var. *laticystis* **var. n.** p. 14 fig., *corniculum* **sp. n.** p. 15 fig., Siluro-Devonian N.W. China, ?*C.* sp. (as Gen. et sp. ind. 5) p. 21 fig., REGNÉLL Rep. Sci. Exped. N.W. Prov. China Publ. Sino-Swed. Exped. Stockholm **17** 5 Invert. Palaeont. 3 1941.

Dactylactis formosa genotype of *Engodactylactis* (q.v.) p. 6, *laevis* genotype of *Plesiodactylis* (q.v.) p. 6, LELOUP **85**.

†*Dendraraea anzoateguensis* **sp. n.** p. 440 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Dendrophyllia araguensis* **sp. n.** p. 445 fig. Oligocene-Miocene Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Densiphyllum rushianum* a *Rotiphyllum* p. 356 fig., HUDSON **63**.

Dichocoenia stokesi, stellaris probably a subspecies of *stokesi* p. 446, WELLS **167**.

†*Diplarea venezuelensis* a synonym of *Calamophyllia sandbergeri* p. 438, WELLS **167**.

†*Diploastraea applanata* p. 397 fig., UMBGROVE **160**.

†*Disophyllum* genolectotype chosen *symmetricum* p. 287, TOLMACHOFF **151**.

†*Dokophyllum*? sp. ind. p. 13 fig., REGNÉLL **122**.

†*Duplophyllum* discussed p. 108, *septarugosum* **sp. n.** p. 113 fig. Permian Texas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

Echinopora lamellosa cf. *gemmacea* p. 289, *horrida* p. 290, UMBGROVE **157**.

Edwardsia sanctae helenae **sp. n.** p. 1 fig. St. Helena, CARLGREN Vidensk. Medd. naturf. Foren. Kjøb. **105** 1941.

†*Elasmophyllia tolmachoffana* p. 442 fig., WELLS **167**.

†*Enallhelia occidentalis* **sp. n.** p. 437 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

Engodactylis **gen. n.** (fam. Cerianthidae) p. 6, genotype (by monotypy) *Dactylactis formosa* p. 6 Mediterranean Sea, LELOUP Bull. Mus. roy. Hist. nat. Belgique **18** 34 1942.

Favia fragum p. 18, THIEL **150**.—*F. speciosa* p. 277, *pallida* p. 278, *matthaii* p. 278 fig., *stelligera* p. 278, *eridani* **sp. n.** p. 279 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

†*Favia* sp. cf. *laxa* p. 36 fig., UMBGROVE **158**.

Favites abdita, flexuosa, favosa, virens p. 279, *yamanarii* var. *profunda* p. 280, *F.* (?) cf. *spectabilis* p. 280 fig., *F. halicora*→ *Acanthastrea* [sic] *hemprichii* p. 280 fig., UMBGROVE **157**.

†*Favites*? sp. ind. p. 15, UMBGROVE **159**.

†*Flabellum* sp. cf. *extensum* p. 298 fig., FRENGUELLI **47** [see also *Lithomyces*].

Fungia echinata p. 290, *scutaria* p. 291 fig., *paumotensis*, *concinna* p. 292, *repanda* p. 293 fig., *danai*, *valida*, *fungites*, *fungites*→ *repanda* p. 294, UMBGROVE **157**.

†*Fungia decipiens* Dollfus is *F.* sp. ind. p. 16, UMBGROVE **159**.

Galaxea fascicularis p. 277, UMBGROVE **157**.

†Gen. et sp. unidentified (fam. Hapsiphyllidae) p. 48 fig., EASTON **34**.—Gen. et sp. ind. 1 (?*Syringaxon* or ?*Petraia* or ? *Streptelasma*) p. 20 fig., sp. ind. 2 (? *Cyathophyllum* or ? *Zaphrentis*) p. 20 fig., sp. ind. 3 (? *Cyathophyllum*) p. 20 fig., sp. ind. 4 (? *Cyathophyllum* or ? *Zaphrentis*) p. 20 fig., sp. ind. 5 (? " *Omphyma* " or ? *Cystiphyllum*) p. 21 fig., REGNÉLL **122**.

Goniastraea as *Goniastrea* [sic] *retiformis* p. 281, *pectinata* p. 282 fig., *planulata* p. 282, UMBGROVE **157**.

†*Goniastraea elegans* Dollfus is *Favites*? sp. ind. p. 15, UMBGROVE **159**.—*G.* as *Goniastrea* [sic] *retiformis* p. 33 fig., *simplicitexta* **sp. n.** p. 35 fig., U. Miocene - U. Neogene Dutch East Indies, UMBGROVE Leidsche geol. Mededeel. **13** 1 1942.

Goniopora tenuidens p. 304, UMBGROVE **157**.

†*Grumia diploctenium* p. 204 fig., FRENGUELLI **47**.

Halomitra robusta p. 295 fig., UMBGROVE **157**.

†Hapsiphyllidae discussed p. 34, gen. et sp. unidentified p. 48, EASTON **34**.

†*Hapsiphyllum* discussed p. 42, EASTON **34**.

†*Heritschia* **gen. n.** p. 94, genotype (by authors' designation) *girtyi* **sp. n.** p. 98 fig. Permian Kansas, *chutsingensis*, *chiuyaoshanensis*, *parachihsianensis*, *lipoensis* p. 97, *columbicum* p. 97 fig., *persicum*, *H.* (?) *densicolumella*, *H.* (?) sp. cf. *lipoensis*, *H.* (?) *chitralicum*, *H.* (?) *muricatum*, *H.* (?) *omiensis* p. 97, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

†*Holophragma anticonvexa* **sp. n.** p. 68 fig. Ordovician Manitoba, OKULITCH Trans. roy. Soc. Canada (3) **37** 4 1943.

†*Homalophyllites* **subgen. n.** (of *Hapsiphyllum*) p. 42, subgenotype (by author's designation) *Lophophyllum calceola* p. 43 fig., *pinnatus* **sp. n.** p. 44 fig., Lower Carboniferous U.S.A., EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

Hydnophora microconos p. 284, *rigida* p. 284 fig., *tenella* var. *applanata* **var. n.** p. 284 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

†*Hydnophora elongata* p. 397 fig., UMBGROVE **160**.

Isarachnactis sp. larva p. 132, NAIR **105**.

Isovactis **gen. n.** (fam. Arachnantidae) p. 11, genotype (by original designation p. 15) *carlgreni* **sp. n.** p. 11 fig. ? Locality, LELOUP Bull. Mus. roy. Hist. nat. Belgique **18** 34 1942.

†*Kesenella* **subgen. n.** (of *Yuanophyllum*) pp. 107–112 fig., *yabei* **sp. n.** pp. 107–112 fig. Lower Carboniferous Japan, NAGAO & MINATO J. Hokkaido Imp. Univ. Fac. Sci. (4) Geol. Min. Sapporo **6** 2 1941 [not seen].

†*Koninckophyllum glabrum* p. 51 fig., EASTON **34**.

†*Leonardophyllum* **gen. n.** p. 85, genotype (by authors' designation) *distinctum* p. 88 fig., *acus* p. 89 fig., **spp. n.** Permian Texas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

Leptastrea [sic] *purpurea* p. 277, UMBGROVE **157**.

†*Lindströmia* (?) *cylindrica* **sp. n.** p. 11 fig. Siluro-Devonian N.W. China, REGNÉLL Rep. Sci. Exped. N.W. Prov. China Publ. Sino-Swed. Exped. Stockholm **17** 5 Invert. Palaeont. 3 1941.

†*Lithodrumus* a synonym of *Caninia* p. 121, *veryi* transferred to *Caninia* p. 128, EASTON **33**.

†*Lithomyces aequalis* p. 203 fig., *costellatus* p. 203 fig., FRENGUELLI **47**.

†*Lithostrotion microstylum* p. 53 fig., EASTON **34**.

Lobophyllia corymbosa, *costata* p. 287, UMBGROVE **157**.

†*Lonsdaleia* (*Waagenella*) *omiensis* referred to ? *Heritschia* p. 97, MOORE & JEFFORDS **100**.

†*Lophamplexus* **gen. n.** p. 90, genotype (by authors' designation) *eliasi* **sp. n.** p. 91 fig. Permian Kansas and Oklahoma, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

Lophohelia tenuis p. 13 fig., THIEL **150.**

†*Lophophyllidium* discussed p. 78, *dunbari* **sp. n.** p. 83 fig. Permian Kansas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

†*Lophophyllum calceola* designated type of *Homalophyllites* p. 42, EASTON **34.**

†*Lophosmilia subgranulosa* **sp. n.** p. 395 fig., var. *trochoides* **var. n.** p. 395 fig., var. *constricta* **var. n.** p. 395 fig., Eocene Sumba (Dutch East Indies), UMBGROVE Verhand. geol. mijnbouw. Genoot. geol. ser. **13** 1943.

†*Maeandraraea* as *Meandraraea* [sic] *plummeri* a species of *Maeandrophyllia* p. 439, WELLS **167.**

†*Maeandrophyllia* as *Meandrophyllia* [*sic*] *plummeri* p. 439 fig., *cariacoensis* **sp. n.** p. 440 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Malonophyllum* discussed p. 76, *kansasense* **sp. n.** p. 76 fig. Permian Kansas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

†*Meniscophyllum* discussed p. 45, *minutum* p. 46 fig., EASTON **34.**

†*Menophyllum* discussed p. 37, EASTON **34.**

Merulina ampliata p. 285, *scabricula* p. 285 fig., *togianensis* **sp. n.** p. 286 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

†*Metriophyllum* discussed p. 31, *deminutivum* **sp. n.** p. 31 fig. Lower Carboniferous Missouri, EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

†*Microcyclus blairi* p. 29 fig., EASTON **34.**

†*Microsolena williamsonensis* **sp. n.** p. 100 fig. Cenomanian Texas, WELLS J. Paleont. Menasha Wis. **18** 1 1944.

Montipora venosa p. 302, *informis* p. 303, UMBGROVE **157.**

Mycedium elephantotus p. 290 fig., UMBGROVE **157.**

†*Myriophyllia borrachensis* **sp. n.** p. 436 fig. Lower Cretaceous Venezuela, key to American spp. p. 436, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Neozaphrentis tenella* p. 45 fig., EASTON **34.**

Oculina discussed p. 5, *virginea* p. 9 fig., *diffusa* p. 11 fig., *fissipara* p. 12, THIEL **150.**—*O.* cf. *diffusa* p. 446, WELLS **167.**

†*Omphyma* see Gen. et sp. ind.

Orbicella curta p. 275 fig., *versipora* p. 276, UMBGROVE **157.**

Ovactis brasiliensis p. 1, LELOUP **85.**

Pachycerianthus ? sp. juv. p. 19, CARLGREN **17.**

†*Palaeocaninia* a synonym of *Caninia* p. 121, EASTON **33.**

Pavona decussata p. 296 fig., *divaricata* p. 297 fig., *frondifera* p. 297 fig., *varians* p. 298, *P.* (*Polyastra*) *obtusata* p. 298 fig., UMBGROVE **157.**

†*Pavona* (*Polyastra*) *ponderosa* p. 16, UMBGROVE **159.**

†*Peetzia* a synonym of *Caninia* p. 121, EASTON **33.**

†*Pentamplexus* [possibly introduced as a **gen. n.**], *simulator*, SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 97].

†*Pentaphyllum* (*Pentaphyllum*) *subcylindricum*, *bulbosum*, *cruciferum*, **spp. n.**, *P.* (*Tachylasma*) *ponderosum*, *superans*, **spp. n.**, *P.* (*Prionophyllum*) *crassiseptum* **sp. n.**, SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 97].

†*Periseris irregularis* p. 439 fig., WELLS **167.**

†*Permia iwanowi* p. 359, *caverna* **sp. n.** p. 360 fig., *carbonaria* **sp. n.** p. 361 fig., Lower Carboniferous England, HUDSON J. Paleont. Menasha Wis. **18** 4 1944.

†*Petraia* see Gen. et sp. ind.

†*Petrophylliella crassiseptata* **sp. n.** p. 396 fig. ? Miocene Sumba (Dutch East Indies), UMBGROVE Verhand. geol. mijnbouw. Genoot. geol. ser. **13** 1943.

Phymactis sanctae helenae p. 5 fig., CARLGREN **17**.

Physogyra astraeiformis **sp. n.** p. 274 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

Phytocoeteopsis **gen. n.** (fam. Halcampactiidae) p. 230, genotype (by original designation) *ramunnii* **sp. n.** p. 231 fig. Madras, PANIKKAR Proc. Zool. Soc. London **1** 1936.

Platygyra phrygia p. 283, UMBGROVE **157**.

†*Platygyra phrygia* p. 37 fig., UMBGROVE **158**.

†*Plerophyllum* (*Plerophyllum*) *aequabile, gerthi,* **spp. n.**, *P.* (*Ufimia*) *persymmetricum, infracarbonicum, isophyllum, tricyclicum, clavatum, schwarzbachi, kobayashii, cuneiseptum, formosum,* **spp. n.**, SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 96].

Plesiodactylis **gen. n.** (fam. Ceranthidae) p. 6, genotype (by monotypy) *Dactylactis laevis* p. 6 Red Sea, LELOUP Bull. Mus. roy. Hist. nat. Belgique **18** 34 1942.

Pocillopora damicornis var. *bulbosa,* var. *cespitosa,* cf. var. *stylophoroides* p. 273, *eydouxi* p. 273 fig., UMBGROVE **157**.

†*Polycoelia* discussed, *P.* (*Polycoelia*) *gracilis, conica, rossica, carbonica,* **spp. n.**, *P.* (*Tetralasma*) *quadriseptata* **sp. n.**, *P.* (*Weissermelia*) *compacta* **sp. n.**, *P.* (*Sochkineophyllum*) **sp. n.** [*sic*], SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 96].

Porites discussed p. 18, *porites* p. 24 fig., *astroides* p. 25 fig., THIEL **150**.—*P. viridis* p. 304, *nigrescens* p. 305 fig., var. *togianensis* **var. n.** p. 305 fig., *capricornis* p. 306 fig., *eridani* **sp. n.** p. 306 fig., spp. p. 307, North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

†*Prionophyllum* **subgen. n.** of *Pentaphyllum, crassiseptum* **sp. n.**, SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 97].

Psammocora contigua p. 299, *togianensis* **sp. n.** p. 299 fig. North Celebes, UMBGROVE Zool. Meded. Leiden **22** 1940.

Pseudactinia varia p. 5, CARLGREN **17**.

†*Pseudocaninia* a synonym of *Bothrophyllum* p. 121, EASTON **33**.

†*Pseudocryptophyllum* **gen. n.** (fam. Streptelasmidae) p. 34, genotype (by author's designation) *cavum* **sp. n.** p. 34 fig. Lower Carboniferous Missouri, EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

†*Rotiphyllum calyculum* p. 32 fig., *hians* **sp. n.** p. 33 fig. Lower Carboniferous Missouri, EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.—*R. rushianum* p. 356 fig., var. *cavum* **var. n.** p. 358 fig., aff. var. *cavum* **var. n.** p. 357 fig., Lower Carboniferous England, cf. *densum* p. 358 fig., HUDSON J. Paleont. Menasha Wis. **18** 4 1944.

Scapophyllia cylindrica p. 287, UMBGROVE **157**.

Seriatopora hystrix p. 272 fig., UMBGROVE **157**.

†*Siderastrea vancouverensis* p. 2 fig., WEAVER **164**.

†*Siderofungia irregularis* a species of *Periseris* p. 439, WELLS **167**.

†*Sochkineophyllum* discussed p. 102, *mirabile* **sp. n.** p. 105 Permian Kansas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.—*S.* a subgenus of *Polycoelia*, **sp. n.** [*sic*], SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 96].

†*Stelechophyllum* **nom. n.** pro *Stylophyllum* Tolmachoff (non Reuss) p. 287, genolectotype *Stylophyllum venukoffi* p. 287, Carboniferous Russia, TOLMACHOFF Geol. Mag. London **70** 1933.

Stephanauge see *Amphianthus*.

†*Stephanocoenia guadalupae* p. 433 fig., WELLS **167**.

†*Stephanotrochus weberianus* p. 32 fig., UMBGROVE **158**.—*S.* sp. p. 3 fig., WEAVER **164**.

Stephensonactis **gen. n.** (fam. Halcampactiidae) p. 231, genotype (by original designation) *ornata* **sp. n.** p. 232 fig. Madras, PANIKKAR Proc. Zool. Soc. London **1** 1936.

†*Streptelasma* see Gen. et sp. ind.

†*Stylangia laddi* **sp. n.** p. 437 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Stylina sucrensis* **sp. n.** p. 435 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

Stylophora pistillata p. 274, UMBGROVE **157.**

†*Stylosmilia gregorii* **sp n.** p. 434 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

Symphyllia recta p. 288, *recta→agaricia* p. 288 fig., *recta→valenciennesii* p. 288 fig., *radians* p. 289, UMBGROVE **157.**

Syndactylactis meridionalis **sp. n.** p. 2 fig. "South Seas," LELOUP Bull. Mus. roy. Hist. nat. Belgique **18** 34 1942.

†*Syringaxon* see Gen. et sp. ind.

†*Tachylasma* a subgenus of *Pentaphyllum, ponderosum, superans,* **spp. n.,** SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 97].

Telmatactis valle-flori p. 7 fig., CARLGREN **17.**

†*Teratophyllum hedini* **sp. n.** p. 18 fig. Siluro-Devonian N.W. China, *T.* (?) sp. p. 19 fig., REGNÉLL Rep. Sci. Exped. N.W. Prov. China Publ. Sino-Swed. Exped. Stockholm **17** 5 Invert. Palaeont. 3 1941.

†*Tetralasma* **subgen. n.** of *Polycoelia, quadriseptata* **sp. n.,** SCHINDEWOLF Abh. Reichsamst. Bodenforsch. Berlin N.F. **204** 1942 [not seen—see Zentralb. Min. Geol. Paläont. Berlin **18** (4) (1) 1943 p. 96].

†*Thamnoseris arborescens* a species of *Actinaraea* p. 440, WELLS **167.**

†*Thecosmilia cumanensis* **sp. n.** p. 441 fig. Lower Cretaceous Venezuela, WELLS J. Paleont. Menasha Wis. **18** 5 1944.

†*Timorphyllum simulans* **sp. n.** p. 102 fig. Permian Texas, MOORE & JEFFORDS State Geol. Surv. Kansas Bull. **38** 1941.

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†*Triplophyllites* **gen. n.** (fam. Hapsiphyllidae) p. 35, genotype (by author's designation) *palmatus* **sp. n.** p. 35 fig. Lower Carboniferous Illinois, *centralis* p. 39 fig., *cliffordanus* p. 39 fig., *exiguus* p. 40 fig., *ida* p. 41 fig., *dalei* p. 42, EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

†*Triplophyllum* discussed p. 38, *terebratum* p. 38 fig., EASTON **34.**

†*Turbinolia midwayensis* p. 114 fig., *tenuis* p. 114 fig., **spp. n.,** var. *conica* **var. n.** p. 115 fig., *pharetra* p. 115 fig., *wautubbeensis* p. 115, *subtercisa* **sp. n.** p. 116 fig., var. *mauricensis* **var. n.** p. 116 fig., var. *lisbonensis* **var. n.** p. 116 fig., *gigantissima* **sp. n.** p. 116 fig., *claibornensis* p. 117, Eocene U.S.A., *insignifica* p. 117, *vicksburgensis* **sp. n.** p. 118 fig. Oligocene U.S.A., MONSOUR J. Paleont. Menasha Wis. **18** 2 1944.

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†*Vesiculophyllum* **gen. n.** (fam. Clisiophyllidae) p. 52, genotype (by author's designation) *Chonophyllum sedaliense* White p. 52 fig. Lower Carboniferous U.S.A., EASTON Illinois State Geol. Surv. Rep. Invest. **97** 1944.

†*Waagenophyllum indicum* p. 95 fig., but *columbicum, persicum* referred to *Heritschia* p. 97, *chitralicum, muricatum, omiensis* referred to ? *Heritschia* p. 97, MOORE & JEFFORDS **100.**

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†*Yuanophyllum* (*Kesenella*) *yabei*—see *Kesenella.*

†*Zaphrentis* aff. *postuma* p. 63 fig., DEMANET **26.**—*Z. centralis* p. 39 fig., *cliffordanus* p. 39 fig., *exigua* p. 40 fig., *ida* p. 41 fig., all transferred to *Triplophyllites,* EASTON **34.**—*Z. costata* and sp. aff. *nodosa* are *Rotiphyllum rushia-*

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INCERTAE SEDIS

NONE

5. ECHINODERMA

ARRANGED BY

A. G. BRIGHTON, M.A.

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†*Ancylocidaris*, MORTENSEN **85** p. 338.

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†*Arachniopleurus*, MORTENSEN **86** p. 32.

†*Arbacina* pp. 281, 365, *monilis* p. 365 fig. 223a, *romana* p. 366 fig. 223b, MORTENSEN **86**.

†*Archaeocidaris fraxinensis* **sp. n.** Devonian Belgium, MAILLIEUX Mém. Mus. Hist. nat. Belg. **92** 1940 pp. 28–30 pl. ii figs. 18–21a.—*A. meurevillensis*, DEMANET **31** p. 61 pl. i fig. 2 [Radioles].

†*Archaeodiadema*, MORTENSEN **85** p. 87.

†*Arialopsis*, MORTENSEN **86** p. 13.

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†*Atlasaster*, MORTENSEN **85** p. 132.

†*Aulechinus*, MORTENSEN **85** p. 341.

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†*Brochechinus* p. 18, *elisae* p. 18 fig. 17, MORTENSEN **86**.

†*Brochopleurus*, MORTENSEN **86** pp. 66, 354.

Caenocentrotus p. 320, *gibbosus* p. 321 figs. 153–155, 157a–b, pl. xxxiv figs. 3–4, pl. lxiii figs. 7–8, 11, 13, 19, MORTENSEN **87**.

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Chaetodiadema p. 215; *africanum* p. 232 figs. 94b, 132a–b, 133, 134c, pl. xxxiii figs. 3–6, pl. lxxii figs. 9-13, 22-23; *granulatum* p. 218 figs. 1b, 125a–b, d, 126–127, pls. xxix–xxxi, pl. xxxii figs. 1–2; *japonicum* p. 223 figs. 125c, e, 128–129, pl. xxxiii figs. 7–9, pl. lxxii figs. 14–21; *keiense* p. 226 figs. 91c, 130, pl. xxxii figs. 3–8, pl. lxxii figs. 1–5; *pallidum* p. 229 fig. 131, pl. lxxii fig. 6, pl. lxxiii figs. 2–6; *tuberculatum* p. 235 figs. 132c–d, 134a–b, pl. xxxiii figs. 1–2, pl. lxxii figs. 7–8; MORTENSEN **85**.—*C. granulatum*, MORTENSEN **86** p. 2 fig. 1a.

Clypeaster rarispinus, MORTENSEN **84** p. 104.

†*Clypeaster* cf. *breunigi*, LOSS **67** p. 16 pl. i fig. 6.

†*Codechinus* p. 358, *rotundus* p. 358 figs. 188–189, MORTENSEN **85**.

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†*Cryptocyphus*, see *Glyphocyphus*.

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†*Desmechinus*, discussion of fossil spp., MORTENSEN **86** p. 340.

Diadema p. 241, *antillarum* p. 269 figs. 144b, 145a, pl. xlvii fig. 8, pl.

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† *Diadema*, discussion of fossil spp., MORTENSEN **85** p. 255.

†*Diademopsis* p. 81, *bowerbanki* p. 84 figs. 38a–f, *serialis* p. 82 fig. 45, MORTENSEN **85**.

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†*Dictyopleurus*, MORTENSEN **86** p. 29.

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†*Diplosalenia* p. 275, *gosseleti* p. 276 fig. 129, MORTENSEN **87**.

†*Ditremaster gregoirei*, LOSS **67** p. 19 pl. i fig. 8.

†*Dubarechinus*, MORTENSEN **86** p. 16.

†*Dumblea*, MORTENSEN **85** p. 135.

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†*Echinometra*, discussion of fossil spp., MORTENSEN **87** p. 355.

†*Echinopedina* p. 118, *edwardsi* p. 119, *gacheti* p. 118 fig. 30c, MORTENSEN **85**.

†*Echinopedina* (*Stereopedina*), MORTENSEN **85** p. 121.

†*Echinopsis* pp. 35, 66, *elegans* p. 36 figs. 35g, 36, MORTENSEN **86**.

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†*Echinotiara*, MORTENSEN **86** p. 66.

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†*Echinus woodwardi*, MORTENSEN **87** p. 177 pl. vi fig. 6.

†*Ectinechinus*, MORTENSEN **85** p. 346.

†*Egyptechinus*, MORTENSEN **85** p. 365.

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†*Endeodiadema*, MORTENSEN **85** p. 336.

†*Engelia*, MORTENSEN **85** p. 335.

†*Eodiadema* pp. 19, 176, *collenoti* p. 178 fig. 102, *parvula* p. 177 fig. 103, MORTENSEN **85**.

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†*Eothuria*, MORTENSEN **85** p. 347.

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†*Erbechinus*, MORTENSEN **86** p. 313.

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†*Farquharsonia*, MORTENSEN **85** p. 333.

†*Gagaria*, MORTENSEN **85** p. 119, **86** pp. 66, 371.

†*Gajechinus subcrenatus*, MORTENSEN **86** p. 392.

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†*Glyphocyphus* p. 25, *radiatus* p. 26 fig. 19a, MORTENSEN **86**.

†*Glyphocyphus* (*Cryptocyphus*), MORTENSEN **86** p. 27.

†*Glyphopneustes* pp. 66, 378, *problematicus* p. 379 fig. 237, MORTENSEN **86**.

†*Glyptechinus*, MORTENSEN **86** p. 375.

†*Glyptocyphus* pp. 65, 376, *rotatus* p. 376 fig. 235g, MORTENSEN **86**.

†*Glyptodiadema*, MORTENSEN **86** p. 33.

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†*Grammechinus*, MORTENSEN **86** pp. 66, 374.

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†*Gymnodiadema*, MORTENSEN **86** p. 16.

†*Hebertia*, MORTENSEN **85** p. 120, **86** p. 35.

†*Hecistocyphus*, MORTENSEN **85** pp. 65, 82.

†*Helikodiadema*, MORTENSEN **85** p. 180.

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†*Helodiadema*, MORTENSEN **85** p. 339.

†*Hemiaster expergitus*, CLARK **27** p. 115 pl. xxii fig. 30. [Radiole.]

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†*Hemidiadema*, MORTENSEN **86** p. 28.

†*Hemipedina* p. 84, *etheridgei* p. 85 fig. 48d, MORTENSEN **85**.

†*Hemipedina* (*Phalacropedina*), MORTENSEN **85** p. 88.

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†*Heteropedina*, MORTENSEN **85** p. 334.

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†*Hypechinus*, MORTENSEN **87** p. 176.

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†*Isechinus* p. 179, *praecursor* p. 179 fig. 80, MORTENSEN **87**.

†*Jacksonechinus*, MORTENSEN **85** p. 350.

†*Jacquiertia minuta* **sp. n.** Jurassic France, MORTENSEN & MERCIER Bull. Soc. linn. Normandie (9) **1** 1939 pp. 59–61 figs. 1–2; taken as type of *Jacquiertia*, ID. p. 59.—*J.*, MORTENSEN **85** p. 355 fig. 185.

†*Javanechinus*, MORTENSEN **86** p. 340.

†*Jeannetia* p. 357, *mortenseni* p. 357 fig. 187, MORTENSEN **85**.

†*Laganum balestrai*, LOSS **67** p. 16 pl. i fig. 5.

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†*Leiocyphus*, MORTENSEN **86** pp. 65, 369.

†*Leiodiadema*, MORTENSEN **85** p. 87.

†*Leiopedina*, MORTENSEN **85** p. 124.

†*Leiopedina* (*Loriolipedina*), MORTENSEN **85** p. 126.

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†*Leptocidaris*, MORTENSEN **85** p. 337.

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†*Lissodiadema* diagnosis p. 328, *lorioli* p. 329 figs. 91a–b, 164–165, pl. xxxv figs. 7–9, pl. lxix fig. 3, MORTENSEN **85**.

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†*Lytechinus*, discussion of fossil spp., MORTENSEN **86** p. 435.

†*Macrodiadema*, MORTENSEN **85** p. 335.

†*Macropneustes* (*Trachipatagus*) sp. ind. ex aff. *meneghenii*, LOSS **67** p. 24 pl. ii fig. 1.

†*Martinechinus*, MORTENSEN **86** p. 349.

†*Medocechinus*, MORTENSEN **86** p. 30.

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†*Mesodiadema*, MORTENSEN **85** p. 80.

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†*Microcyphus*, discussion of fossil spp., MORTENSEN **86** p. 150.

†*Micropedina*, MORTENSEN **85** p. 122.

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†*Miopedina*, MORTENSEN **85** p. 86.

†*Miorthopsis*, MORTENSEN **86** p. 13.

†*Monodiadema* p. 353, *cotteaui* p. 354 fig. 184, MORTENSEN **85**.

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†*Narindechinus*, a synonym of *Phymosoma*, MORTENSEN **85** p. 356.

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†*Nudechinus* discussion of fossil spp., MORTENSEN **86** pp. 400, 407.

†*Oligophyma*, MORTENSEN **86** p. 462.

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†*Orthocidaris*, MORTENSEN **86** p. 14.

†*Ortholophus*, MORTENSEN **86** p. 351.

†*Orthopsis* p. 10, *similis* p. 13 fig. 8e, pl. xxi figs. 10–16, MORTENSEN **86**.

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†*Palaeodiadema*, MORTENSEN **85** p. 179.

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†*Paracentrotus*, discussion of fossil spp., MORTENSEN **87** pp. 157, 166.

†*Paradicoptella*, MORTENSEN **86** p. 247.

†*Paradoxechinus*, MORTENSEN **86** pp. 64, 350.

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†*Parasalenia fontannesi*, MORTENSEN **87** p. 268.

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†*Phalacropedina*, see *Hemipedina*.

†*Pholidocidaris*, MORTENSEN **85** p. 21.

†*Phymopedina* p. 127, *marchamensis* p. 128, MORTENSEN **85**.

†*Plagiechinus*, MORTENSEN **87** p. 355.

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†*Pleurechinus*, MORTENSEN **86** pp. 67, 370.

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†*Polypedina* p. 77, *tounatensis* p. 77 fig. 40, MORTENSEN **85**.

†*Polysalenia*, MORTENSEN **85** p. 354.

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†*Printechinus*, discussion of fossil spp., MORTENSEN **86** p. 308.

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†*Progonechinus* pp. 34, 65, *eocenicus* p. 30 pl. xxi figs. 1–3, MORTENSEN **86**.

†*Propedina*, MORTENSEN **85** p. 131.

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†*Psammechinus* discussion of fossil spp., MORTENSEN **87** p. 124.

†*Pseudarbacina*, MORTENSEN **86** p. 280.

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†*Pseudodicoptella*, MORTENSEN **86** p. 277.

†*Pseudopechinus*, MORTENSEN **86** p. 301.

†*Pseudopedina*, MORTENSEN **85** p. 129.

†*Radiocyphus* p. 32, *hungaricus* p. 32 fig. 32, MORTENSEN **86**.

†*Rhabdechinus*, MORTENSEN **85** p. 365.

†*Rotulechinus*, MORTENSEN **87** p. 177.

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†*Salmacis*, discussion of fossil spp., MORTENSEN **86** pp. 111, 129.

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†*Scaptodiadema*, MORTENSEN **86** p. 17.

†*Schizechinus*, MORTENSEN **86** p. 463.

†*Scolechinus*, MORTENSEN **86** pp. 64, 355.

†*Scoliechinus* p. 465, *axiologus* p. 465 fig. 292, MORTENSEN **86**.

†*Scutulum parisiense*, CHAVAN **19** p. 482.

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†*Sphaerechinus*, discussion of fossil spp., MORTENSEN **86** p. 513.

†*Spaniocyphus*, MORTENSEN **87** p. 180.

†*Stenechinus*, MORTENSEN **85** p. 92.

†*Stephanopsis*, MORTENSEN **86** p. 13.

†*Stephomma*, MORTENSEN **86** p. 13.

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†*Stereopedina*, see *Echinopedina*.

†*Stirechinus*, MORTENSEN **87** p. 177.

†*Stomechinus pulchellus* **sp. n.** Jurassic Argentine, FRENGUELLI Notas Mus. La Plata Paleont. **9** 61 pp. 1–11 pl. figs. 1–3.

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†*Strongylocentrotus*, discussion of fossil spp., MORTENSEN **87** pp. 197, 214.

†*Taxophyma*, MORTENSEN **86** pp. 280, 408.

†*Temnechinus* p. 275, *excavatus* p. 275 fig. 146, pl. xx figs. 26–30, MORTENSEN **86**.

Temnopleurus p. 72 ; *alexandri* p. 88 figs. 54, 55a, pl. ii figs. 1–6 with var. *scalaris* p. 91 pl. ii figs. 7–8, pl. iii figs. 6–11 ; *T. hardwickii* p. 84 fig. 53a, pl. ii figs. 16–18, pl. iii figs. 21–30, with var. *impressus* p. 87 pl. i figs. 4–5, pl. ii figs. 16–18 ; *T. toreumaticus* p. 76 figs. 46, 53b, 55b, pl. i figs. 3, 6, 9, 12, pl. ii figs. 9–15, 19–21, pl. xlv figs. 27–28, with var. *brevispina* p. 82 pl. i figs. 7–8, var. *mortenseni* p. 82 pl. i figs. 10–11, and var. *perezi* p. 82 pl. i figs. 1–2, MORTENSEN **86**.

†*Temnopleurus toreumaticus*, MORTENSEN **84** p. 101.—*T.*, MORTENSEN **86** pp. 74, 83, 87.

Temnopleurus (*Toreumatica*) *apodus* p. 99 figs. 61a–b, 62, 63b, pl. iii figs. 3, 31–33, pl. xlv figs. 10–12, 17 ; *decipiens* p. 104 figs. 45c, 59c, 61c–d, 63a, 64, pl. iii figs. 34–36, pl. xlv figs. 7–8, 13 ; *michaelseni* p. 105 figs. 59b, 65–66, pl. iii figs. 4–5, 13–15, pl. xlv figs. 19, 25–26, 29–31 ; *reevesii* p. 92 figs. 56–58, 59a, 60, pl. iii figs. 1–2, 12, 16–20, MORTENSEN **86**.

Temnotrema p. 244 ; *bothryoides* p. 254 figs. 136a, 137, 138a–b, pl. xlv figs. 4–5 ; *elegans* p. 258 figs. 136b, 138c, pl. xix figs. 9–11, pl. xlv fig. 6 ; *hawaiiense* p. 262 figs. 140a–b, pl. xlv fig. 16 ; *maculatum* p. 265 figs. 140c–d, 141, 142a; *pallescens* p. 268 fig. 144, pl. xlv figs. 21–24 ; *phoinissa* p. 264 ; *pulchellum* p. 267 figs. 40a, 143, pl. xix figs. 13–14, pl. xlv fig. 14 ; *reticulatum* p. 271 figs. 145c–d, pl. xix figs. 4–7 ; *rubrum* p. 252 figs. 133c–d, 135b, pl. xix fig. 12 ; *scillae* p. 269 figs. 145a–b, pl. xix figs. 3, 8, 15–18 ; *sculptum* p. 249 figs. 133a–b, 134, 135a, pl. xix figs. 1–2, pl. xlv figs. 1–3, 15 ; *siamense* p. 259 figs. 38, 139a, 142b with var. *megaloplax* p. 261 figs. 139b–d and var. *rubicundum* p. 260, MORTENSEN **86**.

†*Temnotrema*, discussion of fossil spp., MORTENSEN **86** p. 246.

†*Thierychinus*, MORTENSEN **85** p. 363.

†*Tiarechinopsis*, MORTENSEN **85** p. 364.

†*Tiaridea*, MORTENSEN **85** p. 21.

Toreumatica, see *Temnopleurus*.

Toxopneustes p. 466, *elegans* p. 485 figs. 293b, 295b, pl. xxviii figs. 3–4, pl. xxxi figs. 6–8, pl. liv fig. 12 ; *maculatus* p. 481 pl. xxvi fig. 4, pl. xxxii figs. 8–10 ; *pileolus* p. 472 figs. 240b, 293a, 294, 295a, 296, 297a–b ,298, pl. xxvi fig. 3, pl. xxvii, pl. xxviii figs. 1–2, pls. xxix–xxx, pl. xxxi fig. 9, pl. xxxiii figs. 5–6, pl. liv figs. 1, 3–6, 8–10, 13–14, 16, pl. lv fig. 13 ; *roseus* p. 483 figs. 239b, 295c, 297c, pl. xxxi figs. 1–5, pl. liv figs. 2, 7, 11, 15, pl. lv fig. 14, MORTENSEN **86**.

†*Trigonocidaris* p. 317 ; *albida* p. 318 figs. 180, 181a, pl. xviii figs. 10–13 ; *albidioides* p. 321 fig. 182, pl. l figs. 2, 5 ; *indica* p. 325 figs. 181b, 184–185, pl. xviii figs. 14–18, pl. l fig. 1 ; *micropora* p. 327 figs. 181d, 183a–b, 188a, 189, pl. xviii figs. 1–5, pl. l figs. 3–4, 6–9, 13 ; *radiata* p. 323 figs. 181c, 183c–d, 188b, pl. xviii figs. 6–9, pl. l figs. 10–12 ; *versicolor* p. 326 figs. 186–187, MORTENSEN **86**.

†*Triplacidia*, MORTENSEN **86** pp. 66, 372.

Tripneustes p. 487, *depressus* p. 498 figs. 299b, 305, pl. xxxv figs. 1–2, pl. xxxviii fig. 9, pl. lvi figs. 2, 12 ; *gratilla* p. 500 figs. 306–307, pl. xxxiii figs. 1–3, pl. xxxiv figs. 2–6, pl. xxxv figs. 3–4, pl. xxxvii figs. 1–2, 4–10, pl. xxxviii figs. 1–4, pl. lvi fig. 11 ; *ventricosus* p. 490 figs. 239c, 299a, 300–301, 302a–c, 303–304, pl. xxxiii fig. 4, pl. xxxvi, pl. xxxvii figs. 3, 11–12, pl. xxxviii figs. 5–8, pl. lvi figs. 3, 6–7, 9, 15–17, MORTENSEN **86**.

†*Tripneustes*, discussion of fossil spp., MORTENSEN **86** p. 489.

†*Trochoechinus*, MORTENSEN **87** p. 182.

†*Trumechinus*, MORTENSEN **86** p. 302.

Urechinus naresianus, CLARK **27** p. 113 pl. xxii figs. 35, 37–38.

†*Xenocidaris mariaeburgensis* **sp. n.** pp. 33–36 pl. ii figs. 2–17, with *major* **praemut. n.** pp. 37–38 pl. ii fig. 22, pl. iii **figs. 1–21,** Devonian Belgium, MAILLIEUX Mém. Mus. Hist. nat. Belg. **92** 1940.

Zenocentrotus p. 400 ; *kellersi* p. 400 figs. 198–199, 200a, 201, pl. xlix figs. 1–3 ; *paradoxus* p. 404 figs. 200b, 202–203, pl. xlix figs. 4–5, pl. li fig. 8, pl. lxv figs. 2–6, 8, MORTENSEN **87**.

†*Zeuglopleurus* pp. 64, 352, *colleti* p. 353 figs. 214–215, *costulatus* p. 352 figs. 212–213, MORTENSEN **86**.

Echinoderm ? radiole, CLARK **27** pl. xxii fig. 25.

ASTEROIDEA

Asterina cephea var. *iranica* **var. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 pp. 65–66 fig. 3, pl. i figs. 1–4.

Astropecten marginatus, KENK **52** p. 185 figs. 3, 5.—*A. phragmorus* p. 61, *polyacanthus* p. 60, MORTENSEN **84**.

†*Chomataster brünnichi* **sp. n.** Cretaceous Denmark, RASMUSSEN Medd. dansk. geol. Foren. **10** pp. 422–423 pl. ix figs. 10–11.

†*Comptonia* ? *stelcki* **sp. n.** Cretaceous Canada, MCLEARN Canad. Field-Nat. **58** pp. 133–134 pl. i fig. 1.

Coronaster marchenus **sp. n.** Galapagos, ZEISENHENNE Rep. Allan Hancock Pacific Exped. **8** 1942 pp. 210–213 pl. xxxiii figs. 5–6, pl. xxxiv figs. 2–6.

Heliaster heliantus, PORTER **91** p. 200 fig. 20.

Leptychaster (*Parastropecten*) *stellatus* **sp. n.** Gulf of California, ZIESENHENNE Rep. Allan Hancock Pacific Exped. **8** 1942 pp. 197–201 pl. xxxi figs. 1–3 ; *anomalus*, ID. p. 201.

Linckia guildingii, CLARK **29** p. 374.

†*Lophidiaster postornatus* **sp. n.** Cretaceous Denmark, RASMUSSEN Medd. dansk. geol. Foren. **10** p. 424 pl. ix fig. 16 ; *punctatus*, ID. p. 423 pl. ix fig. 15.—*L. silentiensis* **sp. n.** Cretaceous Canada, MCLEARN Canad. Field-Nat. **58** p. 133 pl. i fig. 3 ; *L.* cf. *silentiensis*, ID. p. 133 pl. i fig. 2.

Luidia mortenseni **sp. n.** West Africa, CADENAT Ann. Soc. Sci. nat. Charente-Inf. n.s. **3** 1941 pp. 53–67 figs. 2–3.—*L. clathrata*, CLARK **29** p. 371.—*L. prionota*, MORTENSEN **84** p. 63 fig. 2.

Luidiaster californicus **sp. n.** California, ZIESENHENNE Rep. Allan Hancock Pacific Exped. **8** 1942 pp. 201–206 pl. xxxi figs. 4–5, pl. xxxii ; *L. horridus*, ID. p. 205.

†*Metopaster dividuus* **sp. n.** Cretaceous Denmark, RASMUSSEN Medd. dansk. geol. Foren. **10** pp.419–420 pl. ix figs. 3–5.

Oreaster reticulatus var. *bermudensis* **var. n.** Bermuda, CLARK Bull. Mus. Comp. Zool. Harvard **89** 1942 pp. 372–374 figs. 1–2.

Phataria mionactis **sp. n.** Ecuador, ZIESENHENNE Rep. Allan Hancock Pacific Exped. **8** 1942 pp. 206–208 pl. xxxiii figs. 3–4.

†*Plesiastropecten* **gen. n.** for type *P. hallovensis* **sp. n.** Jurassic Switzerland, PEYER Ecl. geol. Helv. **36** pp. 320–321 pl. vii, pl. viii figs. 1–2.

†*Pycinaster cornutus* **sp. n.** Cretaceous Denmark, RASMUSSEN Medd. dansk geol. Foren. **10** p. 423 pl. ix figs. 12–14.

†*Ravniaster granulatus* **sp. n.** Cretaceous Denmark, RASMUSSEN Medd. dansk. geol. Foren. **10** p. 422 pl. ix fig. 9 ; *planus*, ID. p. 421 pl. ix figs. 7–8.

†*Spaniaster latiscutatus* p. 1 pl. i fig. 1, sp. 1 p. 3 pl. i fig. 2, sp. 2 p. 3 pl. i fig. 3, UBAGHS **111**.

Stolasterias tenuispina, CLARK **29** p. 375.

Tamaria obstipa **sp. n.** eastern tropical Pacific, ZIESENHENNE Rep. Allan Hancock Pacific Exped. **8** 1942 pp. 208–210 pl. xxxiii figs. 1–2, pl. xxxiv fig. 1.

OPHIUROIDEA

Amphioda obtecta **sp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 pp. 88–90 fig. 15 ; *microplax*, ID. p. 90 fig. 16.

Amphioplus echinulatus pp. 97–98 fig. 19, *seminudus* pp. 91–93 fig. 17, pl. i fig. 9, **spp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 ; *hastatus* p. 95, *laevis* p. 93 fig. 18, ID.

Amphiura crispa pp. 77–79 fig. 9, *fasciata* pp. 76–77 fig. 8, pl. i fig. 10, **spp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 ; *velox*, ID. p. 74 fig. 7.

†*Bohemura constellata*, UBAGHS **109** p. 2 fig. 1, pl. i, pl. ii figs. 10–13.

†*Drepanaster* sp., UBAGHS **109** p. 12 pl. ii figs. 14–17.

†*Furcaster leptosoma*, UBAGHS **108** p. 3 pl. ii fig. 1.

Ophiactis parva, MORTENSEN **84** p. 70 fig. 5.

†*Ophiaulax* **gen. n.** for type *Protaster decheni* Dewalque 1881, Devonian Belgium, UBAGHS Bull. Mus. Hist. nat. Belg. **17** 44 1941 pp. 7–17 fig. 1, pl. i figs. 1a–c, pl. ii figs. 2–5.

Ophiocoma anaglyptica **sp. n.** Indo-Pacific, ELY J. Wash. Acad. Sci. **34** pp. 373–375 figs. 1a–b.

Ophiocten sericeum, CLARK **27** p. 112.

Ophionema hexactis **sp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 pp. 79–81 fig. 10.

Ophionephthys heptacantha pp. 81–84 fig. 12, *iranica* pp. 84–85 fig. 13, **spp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940.

Ophiopsammium semperi, MORTENSEN **84** p. 71 pl. i figs. 5–7.

†*Ophiurella primigenia*, SCHMIDT **101** pl. iii fig. 1a (pars).

Paracrocnida **gen. n.** p. 85 for type *P. persica* **sp. n.** Iranian Gulf, MORTENSEN Danish sci. Invest. Iran **2** 1940 pp. 86–88 fig. 14, pl. i fig. 8.

†*Stephanoura* **gen. n.** p. 6 for type *S. belgica* **sp. n.** Devonian Belgium, UBAGHS Bull. Mus. Hist. nat. Belg. **17** 44 pp. 17–27 pl. i figs. 2a–c, pl. ii figs. 6–17.

†*Urasterella asperula*, SCHMIDT **101** pl. ii fig. 2 (pars).

†Ophiuroid, PEYER **90** pp. 322–323 pl. viii figs. 3–4.

CRINOIDEA

†*Aatocrinus* **gen. n.** p. 213 for type *Zeacrinus* ? *robustus* Beede, Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 p. 215 fig. 45, pl. vii fig. 1 ; *cavumbilicatus* **sp. n.** Carboniferous U.S.A., ID. pp. 215–217 fig. 46, pl. vii figs. 2–3.

†*Acanthocrinus gracilior* var. *vermicularis* **var. n.** pp. 211–212 fig. 58a, *A. jaekeli* **sp. n.**pp. 207–209 fig. 57, pl. xiv fig. 2, Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 ; *gracilior* p. 209 fig. 58b, pl. xiv fig. 1, *lingenbachensis* p. 32, *A.* sp. indet. p. 212 fig. 59, ID.

†*Aesiocrinus barydactylus* p. 387 figs. 77a–b, d, pl. xiv fig. 7, *basilicus* p. 387 fig. 77c, *harii* p. 387 fig. 77e, *magnificus* p. 387 fig. 77f, MOORE & PLUMMER **80.**

†*Agassizocrinus*, MOORE & PLUMMER **80** p. 334.

†*Allagecrinus americanus*, WILLIAMS **117** p. 64 pl. vi figs. 14–15.

†*Ancyrocrinus bulbosus*, GOLDRING **42** p. 15 figs. 1–2, pl. iv.

†*Antihomocrinus gertrudianus* **sp. n.** pp. 111–112 pl. xiii fig. 1, *multifidus* **sp. n.** pp. 109–110 pl. xxvi figs. 2–3, Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 ; *rarifissus* p. 110 pl. xxvi fig. 1, *zeileri* p. 108 pl. xii fig. 5, ID.

†*Aphelecrinus* **gen. n.** p. 190 for type *A. elegans* **sp. n.** Carboniferous U.S.A., KIRK Amer. J. Sci. New Haven **242** pp. 194–196 pl. i figs. 6–8 ; *crassus* pp. 192–193 pl. i fig. 11, *limatus* pp. 196–197 pl. i fig. 10, *mundus* pp. 197–198 pl. i fig. 9, *oweni* pp. 198–200, *simplex* pp. 201–202 pl. i figs. 4–5, **spp. n.** Carboniferous U.S.A., ID.

†*Apographiocrinus* **gen. n.** p. 115 for type *A. typicalis* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 pp. 118–123 figs. 14, 15, 16b, pl. iii figs. 4–5 ; *calycinus* **sp. n.** Carboniferous pp. 128–129 fig. 16a, pl. iii fig. 7; *decoratus* **sp. n.** Carboniferous pp. 126–128 fig. 16d, pl. iii fig. 2; *exculptus* **sp. n.** Carboniferous pp. 123–125 fig. 16f, pl. iii fig. 1 ; *facetus* **sp. n.** Carboniferous pp. 125–126 fig. 16c, pl. iii fig. 3 ; *wolfcampensis* **sp. n.** Permian pp. 129–130 fig. 16e, pl. iii fig. 6, ID.

†*Apollocrinus* **gen. n.** p. 102 for type *A. geometricus* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 pp.104–106 fig. 12, pl. xix fig. 2 ; *florealis* **sp. n.** Carboniferous U.S.A., ID. pp. 106–109 pl. xix fig. 7.

†*Arthroacantha giltayi* **sp. n.** Devonian Belgium, MAILLIEUX Mém. Mus. Hist. nat. Belg. **92** 1940 pp. 17–20 pl. i figs. 1–20.—*A. ornata* p. 52 fig. 10, *schwerdii* p. 50 fig. 9, *tenuispinata* pl. x fig. 3, SCHMIDT **101**.

†*Athlocrinus* **gen. n.** p. 169 for type *A. placidus* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 pp. 170–171 fig. 30, pl. vi fig. 1; *clypeiformis* **sp. n.** pp. 172–173 fig. 31, pl. vi fig. 2, *nitidus* **sp. n.** pp. 171–172 pl. vi fig. 3, Carboniferous U.S.A., ID.

†*Bactrocrinites cyathus* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 100–101 pl. xii fig. 9; *jaekeli*, ID. pl. ii fig. 3 (pars).

†*Botryocrinus consolidatus* **sp. n.** pp. 125–128 fig. 35, pl. xix fig. 5, pl. xxv fig. 8, *dactylus* **sp. n.** pp. 130–131 pl. xxvi fig. 6, *helenae* **sp. n.** pp. 128–130 pl. xxv fig. 7, *B.* ? *jambus* **sp. n.** pp. 131–132 pl. xxvi fig. 4, *schultzei* var. *goldenbergi* **var. n.** pp. 119–122 figs. 31b, 32d, 33, pl. xxiv fig. 2, pl. xxv fig. 9, Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942; *C.* cf. *dactylus* p. 130 pl. xxvi fig. 7, *pachydactylus* p. 124 pl. vi fig. 3, pl. xviii fig. 2, *patellaris* p. 114 pl. vi fig. 2, *irregularis* p. 114 fig. 30, pl. vi fig. 1, pl. xxvi fig. 5, *schultzei* p. 116 figs. 31a, 32a–c, pl. vi figs. 4–6, pl. xii figs. 6–8, pl. xxiv fig. 1, sp. n. aff. *schultzei* p. 123 fig. 34, ID.

†*Brychiocrinus* **gen. n.** p. 146 for type *B. texanus* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 p. 149 fig. 23, pl. ii fig. 1.

†*Carpocrinus* cf. *simplex*, RŮŽIČKA & BOUŠKA **99** p. 3 fig. 4.

†*Cibolocrinus punctatus* **sp. n.** Carboniferous U.S.A. pp. 86–89 figs. 7, 8c–d, pl. i figs. 2–4, *regalis* **sp. n.** Permian U.S.A. pp. 89–90 pl. i fig. 5, MOORE & PLUMMER Univ. Texas Bull. **3945** 1940; *tumidus* p. 87 fig. 8a–b, *typus* p. 85 pl. i fig. 1, ID.

†*Clarkeocrinus spriestersbachi* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 92–96 fig. 26, pl. xi fig. 1.

†*Coenocystis richardsoni*, MOORE & PLUMMER **80** p. 391 fig. 78.

†*Corocrinus imbecillus* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 97–98 pl. xiv figs. 3–4.

†*Cromyocrinus simplex*, MOORE & PLUMMER **80** p. 352 fig. 70.—*C.* sp. n. ?, YAKOVLEV **119** p. 116 fig.

†*Ctenocrinus acidepressus* **sp. n.** pp. 62–63 fig. 13, pl. xx fig. 3, *acutior* **sp. n.** pp. 63–65 fig. 14, pl. viii fig. 3, *clathratus* **sp. n.** pp. 78–79 fig. 20, pl. viii figs. 5–8, *decadactylus* var. *densalternans* **var. n.** pp. 69–70 fig. 16, *C. loricatus* **sp. n.** pp. 80–81 fig. 21, pl. viii figs. 1–2, *rhenanoides* **sp. n.** pp. 84–85 pl. xxii fig. 1 with var. *demissa* **var. n.** pp. 85–86 fig. 23, pl. xxii fig. 2, *C. rhenanus* with vars. *multiplex* **var. n.** p. 83 pl. xviii fig. 3, pl. xx fig. 5, *simplex* **var. n.** p. 83 pl. xx fig. 4, *ulcifer* **var. n.** pp. 83–84 pl. xxiv fig. 3, *C. rugosus* **sp. n.** pp. 74–78 fig. 19, *signatus* **sp. n.** pp. 72–74 fig. 18, pl. xvii fig. 2, Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942; *C. acicularis* p. 60 fig. 12, pl. xxii fig. 3, *decadactylus* p. 65 fig. 15, *nodiferus* p. 86 fig. 24, *rhenanus* p. 81 fig. 22, *stellifer* p. 70 fig. 17, pl. viii fig. 4, *typus* p. 56 fig. 11, pl. xx fig. 6, ID.

†*Culicocrinus inventriosus* [spelt *inventricosus* in explanation of plate] **sp. n.** pp. 43–44 pl. vii fig. 4 with var. *intemperans* **var. n.** pp. 44–45 fig. 6, *C. nodosus* var. *inermis/virgo* **var. n.** p. 42 fig. 5H, pl. vii fig. 8, var. *virgo* **var. n.** p. 41 figs. 5 C, E-F, Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942; *C. nodosus* p. 37 fig. 5A, pl. vii figs. 1–2, with vars. *confluentina* p. 42 fig. 5G and *inermis* p. 41 figs. 5B, D, pl. vii fig. 3, ID.

†*Cupressocrinites schlotheimi* var. *rectangularis* **var. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 103–104 fig. 27.

†*Cupressocrinus elongatus*, BERGOUNIOUX **10** p. 63 fig. 1.

†*Cymbiocrinus* **gen. n.** p. 233 for type *C. romingeri* **sp. n.** Carboniferous U.S.A., KIRK Amer. J. Sci. New Haven **242** pp. 241–243 pl. i figs. 1–4, 8, 9; *grandis* **sp. n.** pp. 238–240 pl. i figs. 6, 7, 10, *lyoni* **sp. n.** pp. 240–241 pl. i figs. 11–12, *tumidus* **sp. n.** pp. 243–244 pl. i figs. 13–14, Carboniferous U.S.A., ID.; *C. anomalos*, ID. p. 236 pl. i fig. 5.

†*Cytidocrinus* **nom. n.** for *Cyrtocrinus* Kirk 1943 Carbonferous U.S.A., Kirk J. Wash. Acad. Sci. **34** p. 85.

†*Cyttarocrinus granopexus* **sp. n.** Devonian Germany, Schmidt Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 35–37 pl. vii figs. 5–7, pl. xxi fig. 3.

†*Delocrinus abruptus* **sp. n.** Permian pp. 289–292 fig. 59, pl. xviii figs. 3–4, *benthobatus* **sp. n.** Carboniferous pp. 264–265 pl. xi fig. 8, *bispinosus* **sp. n.** Carboniferous pp. 263–264 fig. 56B, pl. xi fig. 1, *bullatus* **sp. n.** Carboniferous pp. 261–262 pl. xi fig. 2, *granulosus* **sp. n.** Carboniferous pp. 265–268 pl. xi figs. 5–6, pl. xii figs. 5–6 with var. *moniliformis* **var. n.** Carboniferous pp. 268–269 pl. xii fig. 3, pl. xiii fig. 1 and var. *zonatus* **var. n.** Carboniferous pp. 269–270 pl. xi fig. 3, pl. xii fig. 2, *D. graphicus* **sp. n.** Carboniferous pp. 273–274 pl. xii figs. 4, 11, *major* **sp. n.** Permian pp. 292–294 fig. 60, pl. xv fig. 10, *papulosus* **sp. n.** Carboniferous pp. 274–276 pl. xii fig. 7, pl. xiii fig. 4, *paucinodus* **sp. n.** Carboniferous pp. 276–278 pl. xiii fig. 2, *D.* ? *perexcavatus* **sp. n.** Carboniferous pp. 284–286 fig. 58, pl. iv fig. 6, *D. pictus* **sp. n.** Carboniferous pp. 270–273 fig. 56A, pl. xii fig. 1, pl. xiii fig. 5, *puebloensis* **sp. n.** Permian pp. 288–289 pl. xv fig. 7, *quadratus* **sp. n.** Permian pp. 294–296 fig. 61, pl. xiv fig. 8, pl. xv fig. 8, *subcoronatus* **sp. n.** Carboniferous pp. 280–282 pl. xvii fig. 1, *subhemisphericus* **sp. n.** Carboniferous pp. 258–261 figs. 56C, 57b–c, pl. xi fig. 4, pl. xx fig. 3, *verus* **sp. n.** Carboniferous pp. 282–284 pl. xiii fig. 3, *vulgatus* **sp. n.** Carboniferous pp. 286–288 pl. xviii figs. 1–2, *wolforum* **sp. n.** Carboniferous pp. 278–280 pl. xii fig. 9, U.S.A., Moore & Plummer Univ. Texas Bull. **3945** 1940; *missouriensis*, Id. p. 257 fig. 57a.

†*Denariocrinus* **gen. n.** with type *D. ferula* **sp. n.** Devonian Germany, Schmidt Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 163–167 fig. 45, pl. x fig. 4.

†*Diamenocrinus gonatodes* p. 204 fig. 56, pl. xi fig. 2, pl. xviii fig. 1, *stellatus* p. 201 fig. 55, pl. xi figs. 3–4, Schmidt **101**.

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†*Endelocrinus* **gen. n.** p. 296 with type *Eupachycrinus fayettensis* Worthen 1873 Carboniferous U.S.A., Moore & Plummer Univ. Texas Bull. **3945** 1940 pp. 297–299 fig. 62, pl. ii fig. 7, pl. xvi figs. 2–3; *bifidus* **sp. n.** pp. 308–310 pl. xii fig. 10, *grafordensis* **sp. n.** pp. 306–308 pl. xiv fig. 11, *mitis* **sp. n.** pp. 302–303 fig. 63b, pl. xii fig. 8, *parvus* **sp. n.** pp. 303–306 fig. 63a, pl. xiv figs. 1–2, *rectus* **sp. n.** pp. 300–302 fig. 63d, pl. xiv figs. 3–5, Carboniferous U.S.A., Id.; *allegheniensis* p. 305 fig. 63c, *texanus* p. 310 fig. 63e, pl. xiv fig. 12, Id.

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†*Follicrinus parvestellatus* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 p. 112 pl. xix fig. 1 ; *F.* sp. indet., ID. p. 112 pl. xxi fig. 5.

†*Gasterocoma kayseri* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodensforsch. **182** 1942 pp. 106–107 fig. 28.

†*Gastrocrinus dahmeri* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 139–140 pl. xxi fig. 6 ; *brancai* p. 135 pl. xxiii fig. 6, *drevermanni* p. 135 fig. 36, pl. xxiii fig. 4, *follmanni* p. 134 pl. xxiii fig. 1, *patulus* p. 132 pl. xxiii fig. 2, pl. xxv fig. 10, *rugosus* p. 139 pl. xxiii fig. 5, sp. indet. p. 133 pl. xxiii fig. 3, ID.

†*Gennaeocrinus* ? *germanicus* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 98–100 pl. x figs. 1–2.

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†*Graphiocrinus kingi* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 pp. 315–317 pl. iii fig. 8.

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†*Taxocrinus* sp. indet, Schmidt **101** pp. 189 pl. xxv fig. 6.

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†*Texacrinus* **gen. n.** p. 143 for type *T. gracilis* **sp. n.** Carboniferous U.S.A., Moore & Plummer Univ. Texas Bull.

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†*Thallocrinus acifer* **sp. n.** Devonian Germany, SCHMIDT Abh. Reichsstelle Bodenforsch. **182** 1942 pp. 23–25 fig. 2, pl. iv fig. 1.

†*Thyridocrinus* **gen. n.** for type *Lecythiocrinus* ? *problematicus* Springer 1926 Silurian U.S.A., KIRK J. Wash. Acad. Sci. **34** p. 380; *T. patulus*, ID. p. 389.

†*Triacrinus elongatus* p. 33 fig. 4b, *kutscheri* p. 17 pl. i fig. 1, SCHMIDT **101**.

†*Ulocrinus americanus*, MOORE & PLUMMER **80** p. 338 fig. 67, pl. xix fig. 6.

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†*Zeacrinitis* ? *sellardsi* **sp. n.** Carboniferous U.S.A., MOORE & PLUMMER Univ. Texas Bull. **3945** 1940 pp. 245–248 fig. 55, pl. x fig. 6, pl. xvii fig. 2.

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CYSTIDEA AND EDRIOASTEROIDEA

[Vacant.]

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6. VERMES

ARRANGED BY THE LATE

W. NICOLL, M.D., M.A.,

AND

S. PRUDHOE.

It is with deep regret that we record the death of Dr. William Nicoll on March 29th, 1946. Owing to his last illness much of the matter intended for this Record was never completed. It will be included in the one now in preparation.

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7. BRACHIOPODA

BY

J. K. S. St.-JOSEPH, M.A., Ph.D.

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Full references are given only for new genera or species. In other entries the numeral in "Large bold Clarendon" refers to the list of titles where the full reference will be found. Where a reference is given in the Systematic Part, the volume number is printed in "Small bold Clarendon".

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†*Micromitra modesta*, BELL **6** p. 144 pl. xviii figs. 1–8, 18–19.

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†*Curticia minuta* **sp. n.** Cambrian U.S.A. (Montana), BELL Spec. Pap. geol. Soc. Amer. Washington **54** 1944 pp. 145–146 pl. xviii figs. 22–31.

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†*Dicellomus* p. 148, *amblia* **sp. n.** p. 149 pl. xix figs. 1–5 Cambrian U.S.A. (Montana), *occidentalis* p. 149 pl. xix figs. 6–21, BELL Spec. Pap. geol. Soc. Amer. Washington **54** 1944.

LINGULIDAE

†*Lingula subspatulata*, BERGQUIST **7** p. 10.—*L. elongata* p. 212 pl. xii figs. 5–8, *mytilloides* pp. 62, 210, *squamiformis* p. 211, DEMANET **14**.—*L. mytilloides* p. 64, *squamiformis* p. 65, *pringlei* p. 66 fig. 5, DEMANET **15**.—*L.* cf. *densbergensis* p. 13, sp. p. 12, MAILLIEUX **32**.—*L.* sp. NEWELL & TAFUR **35** pl. xcii fig. 5.

Lingula p. 21, *anatina* fig. 4, PERCIVAL **37**.

ORDER NEOTREMATA

ACROTRETIDAE

†"*Acrotreta*" *snowyensis* **sp. n.** Cambrian U.S.A. (Montana), BELL Spec. Pap. geol. Soc. Amer. Washington **54** 1944 pp. 152–153 pl. xviii figs. 9–17.

DISCINIDAE

†*Discinisca oregonensis*, WEAVER **47** p. 14 pl. ii fig. 16.

†*Orbiculoidea ovalis* **sp. n.** Permian Mexico pp. 49–50 pl. xvii figs. 1–6,

utahensis p. 66 pl. xvii fig. 7, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.—*O. ingens* p. 214 pl. xii figs. 13–14, *missouriensis* p. 62 pl. i fig. 3, p. 213 pl. xii figs. 9–12 DEMANET **14**.—*O. missouriensis*, DEMANET **15** p. 67.—*O.* cf. *siegenensis*, MAILLIEUX **32** p. 13.

†*Roemerella forrierensis*, MAILLIEUX **32** p. 14.

CRANIIDAE

†*Petrocrania* p. 14, *cassis* p. 15, *proavia* p. 16, MAILLIEUX **32**.

†*Philhedra rhenana*, MAILLIEUX **32** p. 16.

ORDER PROTREMATA

ORTHACEA

BILLINGSELLIDAE

†*Billingsella* ? sp. HARRINGTON & LEANZA **24** p. 216 pl. i fig. 14.

ORTHIDAE

†*Orthis* (*Glyptorthis*) *speciosa* **sp. n.** Ordovician Scotland, REED Ann. Mag. Nat. Hist (11) **11** 1944 pp. 215–216 pl. iii figs. 1–1a.

DALMANELLACEA

DALMANELLIDAE

†*Dalmanella* sp., NEWELL & TAFUR **35** pl. xcii fig. 1.

WATTSELLIDAE

†*Fascicostella belgica* **sp. n.** Devonian Belgium pp. 17–18 figs. 1–1a, *dorsoplana* p. 17, MAILLIEUX Mém. Mus. Hist. nat. Belg. **96** 1941.

RHIPIDOMELLIDAE

†*Platyorthis circularis*, MAILLIEUX **32** p. 19.

†*Rhipidomella hamoni*, MAILLIEUX **32** p. 19.

SCHIZOPHORIIDAE

†*Isorthis trigeri*, MAILLIEUX **32** p. 22.

†*Schizophoria plicata* **sp. n.** Carboniferous Spain pp. 60–61 pl. iii figs. 26–27, *resupinata* p. 59 pl. vi figs. 16–17, sp. p. 59 pl. iii fig. 29, DELÉPINE Mém. Acad. Sci. Paris **66** 3 1943.—*S.* p. 108, *allani* pp. 109–110 pl. i figs. 4–5, *athabaskensis* pp. 110–111 pl. i figs. 2–3 **spp. n.** Devonian Canada, *iowensis* p. 109, *lata* p. 109 pl. i fig. 1, WARREN Trans. roy. Soc. Canada (3) **38** 4 1944.—*S.* aff. *hudsoni*, DEMANET **14** p. 215 pl. xii figs. 15–17.—*S.* p. 20, *provulvaria* p. 20, *vulvaria* p. 21, cf. *striatula* p. 21, MAILLIEUX **32**.

PENTAMERACEA

PENTAMERIDAE

†*Conchidium hercynicum*, MAILLIEUX **32** p. 22.

†*Seminula* sp., DELÉPINE **13** p. 75 pl. iii figs. 28, 34–39.

STROPHOMENACEA

STROPHOMENIDAE

†*Derbya crassa* p. 61 pl. vi figs. 1–2, DELÉPINE **13**.—*D. hindi* p. 216 pl. xii fig. 18, aff. *gigantea* p. 217 pl. xii fig. 19, DEMANET **14**.—*D. hindi*, DEMANET **15** p. 68 pl. i fig. 4.

†*Hipparionyx hipponyx*, MAILLIEUX **32** p. 29.

†*Leptaena* p. 23, *rhomboidalis* p. 23, MAILLIEUX **32**.

†*Leptostrophia explanata*, MAILLIEUX **32** p. 27.

†*Meekella enigma* **sp. n.** Permian Mexico, CLOUD Spec. Pap. geol. Soc. Amer. Washington **54** 1944 pp. 50–51 pl. xix figs. 18–19, 22–23.

†*Ōpikina* p. 188 fig. 10, *ampla* p. 190 pl. ii fig. 26, *auriculata* pp. 190–191 pl. ii fig. 17, *gloucesterensis* pp. 191–192 pl. ii fig. 19, *hemispherica* p. 192 pl. ii fig. 20, *ovalis* pp. 192–193, ? *ovalis* p. 193, *platys* pp. 193–194 pl. ii figs. 21a–b and var. p. 194, *sinclairi* p. 196 pl. ii figs. 18a–b, *subtriangularis* pp. 196–197 pl. ii fig. 22, *tumida* pp. 197–198 pl. ii fig. 16 **spp.n.**, *septata* var. *borealis* **var. n.** p. 195 p. ii fig. 15, *wagneri* p. 198 with var. *robusta* pp. 198–199 pl. ii figs. 25a–b **var. n.** Silurian Canada, *inquassa* p. 192, *rugosa* p. 194 with var. *avita* p. 195, *transitionalis* p. 197, *williamsi* p. 199, WILSON Trans. roy. Soc. Canada (3) **38** 4 1944.

†*Ōpikinella* **gen. n.** p. 199 for type *O. affinis* **sp. n.** pp. 199–200 pl. ii fig. 23, *salmoni* p. 200 pl. ii fig. 24, Silurian Canada, WILSON Trans. roy. Soc. Canada 3 **38** 4 1944.

†*Plectodonta thraivensis* var. *divergens* **var. n.** Ordovician Scotland, REED Ann. Mag. Nat. Hist. (11) **11** 1944 pp. 216–217 p. iii figs. 3–3a.

†*Rafinesquina* p. 158 figs. 1–9, *apicalis* p. 167 p. ii fig. 2, *calderi* p. 168 pl. i fig. 9, *gibbosa* p. 178 pl. ii fig. 13, *hullensis* pp. 170–171 pl. i fig. 19, *laurentina* pp. 178–179 p. ii fig. 12, *miodeltoidea* pp. 179–180 pl. ii fig. 9, *normaloides* p. 181 pl. ii fig. 5, *okulitchi* pp. 181–182 pl. ii fig. 7, *opeongoensis* p. 171 pl. i fig. 16, *orleansensis* pp. 171–172 pl. i fig. 13, *ottawaensis* pp. 182–183 pl. ii figs. 14a–b, *patula* pp. 172–173 pl. i fig. 12, *praedeltoidea* pp. 183–184 pl. ii fig. 11, *rotunda* p. 174 pl. i fig. 7, *salmoni* pp. 184–185 pl. ii fig. 8, *sinuata* pp. 187–188 pl. ii fig. 10, *subcamerata* p. 175 pl. ii fig. 1, *subtrigonalis* pp. 175–176 pl. i figs. 15 **spp. n.**, *semicircularis* **sp. n.** pp. 185–186 pl. ii fig. 4 with var. *minor* **var. n.** pp. 186–187 pl. ii fig. 3, *alternata* p. 159 pl. i fig. 3 with vars. *alata* pp. 160–161 pl. i fig. 17, *intermedia* p. 161 pl. i fig. 2, *plana* pp. 161–162 pl. i fig. 1, *platys* pp. 162–163 pl. i fig. 10, *pota* pp. 163–164 pl. i fig. 18, *quadrata* p. 164 pl. i fig. 5, *semiquadrata* pp. 164–165 pl. i fig. 6 and *transversa* p. 165 pl. i fig. 11 **vars. n.**, *esmondensis* var. *borealis* pp. 169–170 pl. i fig. 8 **var. n.** Silurian Canada, *carlottina* p. 166, *camerata* p. 168, *declivis* p. 176, cf. *deerensis* p. 176, *deltoidea* p. 177, *equipunctata* p. 169, *lennoxensis* p. 166 pl. i fig. 4, cf. *lewisensis* p. 167, *normalis* p. 180, *praecursor* p. 173, pl. i fig. 14, *prestonensis* p. 173, *robusta* p. 174, *sardesoni* p. 185 pl. ii fig. 6, WILSON Trans. roy. Soc. Canada (3) **38** 4 1944.

†*Schellwienella major*, MAILLIEUX **32** p. 28.

†*Sowerbyella* (*Plectodonta*) cf. *minor*, MAILLIEUX **32** p. 27.

†*Streptohynchus* cf. *gregarium*, CLOUD **11** p. 50.

†*Stropheodonta gigas* p. 26, *murchisoni* p. 24, *piligera* p. 25, *steiningeri* p. 24, *taeniolata* p. 25, *virgata* p. 24, MAILLIEUX **32**.

†*Strophomena planumbona* var. *girvanensis* **var. n.** Ordovician Scotland, REED Ann. Mag. nat. Hist. (4) **11** 1944, pp. 218–219 pl. iii fig. 5.

†*Tropidoleptus rhenanus*, MAILLIEUX **32** p. 30.

CHONETIDAE

†*Anoplia theorassensis* **sp. n.** Devonian Belgium pp. 34–36 figs. 2–4, *nucleata* p. 35 fig. 5, MAILLIEUX Mém. Mus. Hist. nat. Belg. **96** 1941.

†*Eodevonaria dilatata*, MAILLIEUX **32** p. 33.—*Chonetes* (*E.*) *celtica* **sp. n.** Ordovician Scotland, REED Ann. Mag. nat. Hist. (11) **11** 1944 pp. 217–218 pl. iii figs. 2–2a.

†*Chonetes deliciasensis*, CLOUD **11** p. 51 pl. xvii figs. 8–10.—*C. granulifera* p. 62 pl. vi figs. 6–8, *latesinuata* p. 64 pl. vii figs. 3–5, DELÉPINE **13**.

†*Chonetes* (*Chonetes*) *laguessianis* pp. 63, 217 DEMANET **14**.—*C.* (*C.*) *granulifer* p. 68 pl. i figs. 5–11 with var. *transversalis* p. 71 pl. i figs. 12–17, *hardrensis* var. *shipseyi* p. 71 pl. i figs. 18–19, *laguessianus* p. 72, DEMANET **15**.—*C.* (*C.*) *sarcinulatus*, *subquadratus*, MAILLIEUX **32** p. 31.

†*Chonetes* (*Lissochonetes*) *minutus* **sp. n.** Carboniferous Belgium, DEMANET Mém Mus. Hist. nat. Belg. **101** 1943 pp. 72–73 pl. i figs. 20–22.

†*Chonetes* (*Plicochonetes*) *plebejus* p. 32, *semiradiatus* p. 33, MAILLIEUX **32**.—*Plicochonetes* (*C.*) *crassistrius minimus*, DEMANET **14** p. 64.

†*Chonetes* (*Semenewia*) *verdinnei*, DEMANET **14** p. 218 pl. xii figs. 20–22.—*C.* (*S.*) *verdinnei*, DEMANET **15** p. 72.

†*Chonetina* cf. *consanguinea* p. 66 pl. xvii figs. 14–15, cf. *quadrata* p. 66, CLOUD **11**.

PRODUCTIDAE

†*Avonia subquadrata* **sp. n.** Permian Mexico pp. 53–54 pl. xvii figs. 39–42, *costata* p. 53 pl. xvii figs. 11–12, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.

†*Buxtonia* cf. *peruviana*, CLOUD **11** p. 66.

†*Cancrinella rugosa* **sp. n.** Permian Mexico, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944 p. 52 pl. xvii figs. 32–34.

†*Dictyoclostus* p. 51, *deminutivus* **sp. n.** Permian Mexico p. 52 pl. xvii figs. 35–38, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.—*Productus* (*D.*) *gruenewaldti* p. 70 pl. vi figs. 9–10, *portlockianus* var. *crassicostatus* p. 68 pl. vi figs. 11–14, cf. *transversalis* p. 67 pl. iii figs. 3–4, DELÉPINE **13**.—*P.* (*D.*) *semireticulatus*

hermosanus, DEMANET **14** p. 220 pl. xiii fig. 1.—*P.* (*D.*) *craigmarkensis* p. 77 pl. ii fig. 1, *gallatinensis* p. 78 pl. ii figs. 8–11, *retiformis* p. 76 pl. ii figs. 2–3, *scoticus* p. 75 pl. i figs. 26–27, aff. *americanus* p. 77 pl. ii figs. 4–7, DEMANET **15**.

†*Marginifera popei minor*, CLOUD **11** p, 54 pl. xvii figs. 16–18.—*M. pusilla*, DELÉPINE **13** p. 72 pl. iii figs. 8–11.

†*Proboscidella fasciculata* **sp. n.** Carboniferous Spain, DELÉPINE Mém. Acad. Sci. Paris **66** 3 1943 pp. 71–72 pl. iii figs. 1–2.

†*Productus* (*Echinoconchus*) *punctatus* p. 65 pl. iii figs. 5–7 DELÉPINE **13**.

†*Productus* (*Eomarginifera*) *frechi* p. 64, *longispinus* p. 65, DEMANET **14**.

†*Productus* (*Linoproductus*) *cora*, DELÉPINE **13** p. 73.—*P.* (*L.*) *cora*, DEMANET **15** p. 80 pl. ii figs 16–19.

†*Productus* (*Productus*) *carbonarius* pp. 64, 219 pl. xii figs. 23–25, DEMANET **14**.—*P.* (*P.*) aff. *muricatus*, DEMANET **15** p. 79 pl. ii figs. 12–15.

†*Productus* (*Pustula*) *aculeatus* var. *radialis* **var. n.** Carboniferous Spain DELÉPINE Mém. Acad. Sci. Paris **66** 3 1943 pp. 66–67 pl. iii fig. 12.—*P.* (*P.*) *rimberti* p. 73 pl. i figs. 23–25, *piscariae* p. 74 pl. i figs. 28–31, DEMANET **15**.

†*Striatefera* aff. *pinniformis*, CLOUD **11** p. 66 pl. xix fig. 17.

†*Waagenoconcha* cf. *montpelierensis*, CLOUD **11** p. 66 pl. xvii fig. 13.

RICHTHOFENIIDAE

†*Prorichthofenia likharewi* p. 54 pl. xviii figs. 32–33, *permiana* p. 54 pl. xviii figs. 35–37, sp. p. 55 pl. xviii fig. 34, CLOUD **11**.

OLDHAMINIDAE

†*Leptodus* cf. *americanus*, CLOUD **11** p. 67 pl. xix fig. 21.

ISOGRAMMIDAE

†*Isogramma davidsoni*, DELÉPINE **13** p. 74.

ORDER TELOTREMATA

RHYNCHONELLACEA

CAMAROTOECHIIDAE

†*Camarotoechia daleidensis* p. 36, *siegenensis* p. 37, MAILLIEUX **32**.

†*Hypothyridina cameroni* pp. 114–115 pl. ii figs. 11–12 **sp. n.** Devonian Canada, cf. *emmonsi* p. 113 pl. ii figs. 13–14, cf. *magister* p. 114 pl. ii fig. 15, WARREN Trans. roy. Soc. Canada (3) **38** 4 1944.

†*Leiorhynchoidea* **gen. n.** p. 57 for type *L. schucherti* **sp. n.** p. 58 pl. xviii figs. 28–31, pl. xix figs. 2–4, 6–8, *laevis* **sp. n.** pp. 58–59 pl. xviii figs 23–27 Permian Mexico, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.

†*Leiorhynchus lesleyi*, CLOUD **11** pl. xix fig. 1.—*L. carboniferus polypleurus*, DEMANET **14** p. 65.—*L. rockymontanus*, DEMANET **15** pl. 82 pl. ii fig. 20.—*L. castanea* p. 111 pl. i figs. 6–10, *walcotti* p. 112 pl. ii figs 7–10, WARREN **46**.

†*Paranorella* **gen. n.** p. 59 for type *P. imperialis* **sp. n.** pp. 60–61 pl. xix figs. 5, 9–16, 20 Permian Mexico, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.

†*Pugnax* sp., DELÉPINE **13** p. 95 pl. vi figs. 17–29.

†*Pugnoides* p. 55, *bisulcatus* var. *mexicanus* **var. n.** Permian Mexico pp. 55–57 pl. xviii figs. 1–7, ? n. sp. p. 57 pl. xvii figs. 26–28, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.—*P. sandersoni* **sp. n.** Devonian Canada, WARREN Trans. roy. Soc. Canada (3) **38** 4 1944 pp. 115–116 pl. ii figs. 5–6.

†*Rhynchocamera anceps* **sp. n.** Ordovician Scotland, REED Ann. Mag. Nat. Hist. (11) **11** 1944 pp. 219–220 pl. iii figs. 4–4a.

†*Rhynchopora taylori*, CLOUD **11** p .67 pl. xvii figs. 29–31.

†*Stenoscisma kingi* **sp. n.** Permian Mexico, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944 p. 61 pl. xvii figs. 19–21.

†*Straelenia dunensis* p. 37, *losseni* p. 38, MAILLIEUX **32**.

†*Uncinulus* p. 38, *antiquus* p. 39, *eifelensis* p. 41, *frontecostatus* p. 40, *pila* p. 40, *sancti-michaelis* p. 41, MAILLIEUX **32**.

RHYNCHONELLIDAE

†*Hemithyris astoriana* p. 12 pl. i fig. 12, sp. A p. 12 figs. 12–15, 17, sp. p. 13 pl. ii fig. 7, WEAVER **47**.

†*Piarorhynchia radstockiensis*, LANG **27** p. 152 pl. xvii fig. 9.

†*Rhynchonella agriensis* **sp. n.** Jurassic Georgia, POPKHADZE Bull. Mus. Géorgie, Tiflis **12A** 1943 pp. 134–135 pl. i fig. 6.—*R. washingtoniana*, WEAVER **47** p. 13 pl. ii figs. 8–11.

ATRYPACEA

ATRYPIDAE

†*Atrypa* p. 117, *albertensis* pp. 118–119 pl. iii figs. 13–15, *andersonensis* pp. 119–120 pl. iii figs. 16–18, *arctica* pp. 120–121 pl. iii figs. 19–21, *clarkei* pp. 122–123 pl. iii figs. 10–12 **spp. n.**, *borealis* **sp. n.** pp. 121–122 pl. iii figs. 4–6 with var. *lata* **var. n.** p. 122 pl. iii figs. 7–9, *devoniana* p. 118, WARREN Trans. roy. Soc. Canada 3 **38** 4 1944.—*A. lorana* p. 41, *reticularis* p. 42, MAILLIEUX **32**.

†*Plectatrypa shallochensis* **sp. n.** Ordovician Scotland, REED Ann. Mag. Nat. Hist. (11) **11** 1944 p. 220 pl. iii fig. 6.

COELOSPIRIDAE

†*Anoplotheca* p. 42, *venusta* p. 43, MAILLIEUX **32**.

SPIRIFERACEA

SPIRIFERIDAE

†*Brachythyrina* p. 88, *pinguisiformis* **sp. n.** pp. 89–93 figs. 6–9 with vars. *lata* p. 95 fig. 11 and *trigonalis* pp. 93–95 fig. 10 **vars. n.** Carboniferous Russia (Moscow basin) SEMICHATOVA Bull. Acad. Sci. U.R.S.S. Sér. Biol. **1942** 1–2.—*Spirifer* (*B.*) *strangwaisi*, DELÉPINE **13** p. 90 pl. iv figs. 1–9, 22.

†*Crurithyris* p. 62, *attenuata* **sp. n.** Permian Mexico pp. 62–63 pl. xvii figs. 22–25, CLOUD Spec. Pap. geol. Soc. Amer. Washington **52** 1944.—*C. amoena* p. 65, *urei* p. 65 pl. i fig. 4, p. 222 pl. xiii figs. 6–7, DEMANET **14**.—*C. carbonaria* DEMANET **15** p. 83 pl. ii fig. 21.

†*Cyrtospirifer* p. 125, cf. *whitneyi* p. 125 p. iii figs. 26–29, WARREN **46**.

†*Gürichella prumiensis*, MAILLIEUX **32** p. 44.

†*Hysterolites carinatus* p. 46 *crassicosta* p. 47, *dorsocavus* p. 49, *ignoratus*, *incertus* p. 48, *jaekeli* p. 50, *latecostatus* p. 47, *lateincisus* p. 46, *mediorhenanus*, *montanus* p. 49, *subcuspidatus* p. 45, *undutiferus* p. 51, *wetteldorfensis* p. 50, MAILLIEUX **32**.

†*Hysterolites* (*Acrospirifer*) *arduennensis*, *paradoxus* p. 52, *pellico* p. 51, MAILLIEUX **32**.

†*Hysterolites* (*Paraspirifer*) *auriculatus*, MAILLIEUX **32** p. 53.

†*Martinia glabra*, DELÉPINE **13** p. 93 pl. iii figs. 22–23.—*M.* aff. *glabra*, DEMANET **14** pp. 66, 223.—*M. franklini* p. 126 pl. ii figs. 3–4, *occidentalis* p. 127 pl. ii figs. 1–2, *sublineata* p. 127 pl. iii figs. 22–25, WARREN **46**.

†*Phricodothyris* sp., DEMANET **14** p. 221.

†*Punctospirifer kentuckyensis*, DEMANET **14** p. 224 pl. xiii figs. 3–5.

†*Reticularia* cf. *elliptica* p. 94 pl. iii 24–25 cf. *osegensis* p. 95 pl. vi figs. 18–26, DELÉPINE **13**.

†*Spirifer* cf. *rockymontanus* var. *hispanicus* **var. n.** Carboniferous Spain, DELÉPINE Mém. Acad. Sci. Paris **66** 3 1943 pp. 88–90 pl. iii figs. 13–21, pl. v figs. 6–9.—*S. neomarcoui* **sp. n.** p. 61 pl. ii figs. 1–2, *moosakhailensis* p. 57 pl. i figs. 1–5 with form *rectiareata* **form n.** p. 59 pl. i figs. 6–7 Carboniferous India (Salt Range), *marcoui* p. 60 pl. ii figs. 2–5, LICHAREW Bull. Acad. Sci. U.R.S.S. Sér. Biol **1942**.—*S. ustyensis* **sp. n.** pp. 79–85 figs. 2–3 with vars. *rotundata* p. 87 fig. 5 and *vulgaris* pp. 85–87 fig. 4 **vars. n.** Carboniferous Russia (Moscow basin) SEMICHATOVA Bull. Acad. Sci. U.R.S.S. Sér. Biol. **1942** 1–2.—*S. allani* **sp. n.** Devonian Canada, WARREN Trans. roy. Soc. Canada 3 **38** 4 1944 pp. 123–125 pl. ii figs. 16–18.—*S. bisulcatus*, DEMANET **14** p. 221 pl. xiii fig. 2.—*S. daleidensis* p. 44, *trigeri* p. 43, MAILLIEUX **32**.

†*Spirifer* (*Choristites*) *asturicus* **sp. n.** Carboniferous Spain pp. 82–84 pl. v figs. 1–5, *densicostatus* p. 82 pl. iv fig. 10, cf. *fritschi* p. 84 figs. 14_{3-4} pl. iv figs. 12–13, *loczyi* p. 81 pl. iv fig. 14, *mosquensis* p. 78 pl. iv figs. 16–17, 19, *myatschkovensis* p. 80 pl. iv figs. 15, 18, 20, *pavlovi* p. 87 fig. 14 pl. iv figs. 21a, b, pl. v figs. 18–20, cf. *pavlovi* p. 88 pl. v figs. 10–11, *trautscholdi* fig. 14_2, DELÉPINE **13**.

†*Spirifer* (*Licharewia*) *rugulatus*, LICHAREW **29** p. 71 pl. i figs. 1–14.

†*Spirifer* (*Neospirifer*) *fasciger*, DELÉPINE **13** p. 91 pl. v figs. 12–17.

SPIRIFERINIDAE

†*Cyrtina heteroclita, multiplicata*, MAILLIEUX **32** p. 55.—*C. billingsi*, WARREN **46** p. 129 figs. 1–3 pl. ii figs. 19–21.

†"*Spiriferina*" p. 63, *laxa* p. 63, CLOUD **11**.

†*Spiriferina* (*Spiriferellina*) *campestris*, HARRINGTON **22** p. 244 fig. 1.

†*Spondylospira*, VOKES & HAAS **45** p. 283.

ROSTROSPIRACEA

MERISTELLIDAE

†*Nucleospira marginata*, MAILLIEUX **32** p. 56.

RHYNCHOSPIRINIDAE

†*Hustedia mexicana* p. 64 pl. xviii figs. 12–14, cf. *meekana* p. 64 pl. xviii figs. 9–11, CLOUD **11**.

†*Retzia crassicosta*, MAILLIEUX **32** p. 59.

ATHYRIDAE

†*Athyris caeraesana* p. 58, *globula* p. 59, *undata* p. 57, MAILLIEUX **32**.

†*Composita emarginata affinis*, CLOUD **11** p. 65 pl. xviii figs. 20–22.

TEREBRATULACEA

CENTRONELLIDAE

†*Rensselandia laevis*, WARREN **46** p. 116 pl. i figs. 12–13.

†*Rhenorensselaeria* cf. *propinqua*, MAILLIEUX **32** p. 62.

†*Trigeria gaudryi* p. 60, *guerangeri*, *oliviani* p. 61, MAILLIEUX **32**.

STRINGOCEPHALIDAE

†*Bornhardtina* p. 125, *coulteri* **sp. n.** pp 126–128 fig. 3 pl. iv fig. 7, pl. v figs. 1–5 Devonian Australia (N.S.W.), BROWN J. roy. Soc. N.S.W. **77** 3 1944.

†*Stringocephalus* p. 122, *burtini* p. 122 fig. 2 pl. iv figs. 1–6 BROWN **9**.—*S. burtini*, WARREN **46** p. 117 pl. i fig. 11.

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†*Cryptonella macrorhyncha* p. 65, *mediocostata*, *rhenana* p. 64, MAILLIEUX **32**.

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†*Terebratulina parisiensis*, POPKHADZE **38** p. 133 pl. i fig. 7.—*T. oakvillensis* p. 14 pl. i fig. 8, *unguicula* var. B p. 15 pl. i fig. 11, WEAVER **47**.

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8. BRYOZOA (POLYZOA)

BY

ANNA B. HASTINGS, M.A., Ph.D.

I.—TITLES

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Ordovician.—*France*, PRANTL **47**, **48**; *Bohemia*, PRANTL **46**; *Pennsylvania, U.S.A.*, KAY **34**; *Canada*, FRITZ **24**.

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†*Ascodictyon*, discussed and defined, p. 526, key to species, p. 528, *A. nebraskensis* **sp. n.** Permian Nebraska, U.S.A., p. 529, *A. northropi* **sp. n.** Carboniferous New Mexico, U.S.A., p. 531, *A. oklahomensis* **sp. n.** Carboniferous Nebraska, U.S.A., p. 532, *A. youngi*, p. 532, *A. sparsum, parvulum*, p. 533, CONDRA & ELIAS Bull Geol. Soc. Amer. Wash. D.C. **55** 5 1944.

†*Bascomella*, discussed and defined, perhaps not Ctenostome, p. 538, *B. gigantea*, p. 539, *B. fusiformis* **sp. n.** Carboniferous Nebraska, U.S.A., *B. subsphaerica* **sp. n.** Permian Arizona, U.S.A., p. 541, CONDRA & ELIAS Bull. Geol. Soc. Amer. Wash. D.C. **55** 5 1944.

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†*Heteronema*, discussed and defined, perhaps not Ctenostome, p. 542, *H. carbonarium*, p. 543 *H. parvula* **sp. n.**, Carboniferous and Permian, Nebraska, Oklahoma and Kansas, U.S.A., p. 543, *H. magna* **sp. n.**, Carboniferous and Permian Nebraska, Oklahoma, Kansas and Texas, U.S.A., p. 543, CONDRA & ELIAS Bull. Geol. Soc. Amer. Wash. D.C. **55** 5 1944.

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†*Ptychocladia*, belongs to *Foraminifera*, CONDRA & ELIAS Bull. Geol. Soc. Amer. Wash. D.C. **55** 5 1944 p. 547.

†*Rhopalonaria*, discussed and defined, perhaps not Ctenostome, p. 545, *R. graphicus* **sp. n.** Carboniferous Kansas, *R. dendriformis* **sp. n.** Permian Nebraska, p. 546, *R. permiana, timorensis, keokukensis*, p. 547, CONDRA & ELIAS Bull. Geol. Soc. Amer. Wash. D.C. **55** 5 1944.—*R. irregularis* **sp. n.** Devonian New Mexico, U.S.A., FRITZ J. Paleont. Menasha, Wis. **18** 1 1944 p. 33.

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†*Vinella*, discussed and defined, p. 533, *V. ulrichi* **sp. n.** Carboniferous Texas, U.S.A., p. 536, CONDRA & ELIAS Bull. Geol. Soc. Amer. Wash. D.C. **55** 5 1944.

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9. MOLLUSCA

BY

A. E. SALISBURY, A.M.I.E.E.

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II.—SUBJECT INDEX

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III.—SYSTEMATIC INDEX

N.B.—FULL REFERENCES ARE GIVEN ONLY IN THE CASE OF A NEW GENUS, SPECIES OR VARIETY. IN OTHER CASES THE NUMBER IN "**Large Bold Clarendon**" REFERS TO THE LIST OF TITLES WHERE THE FULL REFERENCE WILL BE FOUND. WHERE THE REFERENCE IS GIVEN IN THE SYSTEMATIC PART, THE VOLUME NUMBER IS PRINTED IN **Smaller Clarendon.**

Note.—The arrangement here used follows, in general, that of Thiele's Handbuch. The most important differences are that Epitoniacea *and* Pyramidellacea *are placed immediately preceding* Muricacea *in order of grouping, and the families* Triviidae *and* Eratoidae *are placed in* Lamellariacea.

Where more than one page is given in a reference, the one in roman type is where a new name is first mentioned and the one in *italic* is where the gen. or sp. is actually described.

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Notohaliotis vixlirata **sp. nov.** Ellenbrook, Western Australia, B. C. COTTON Trans. roy. Soc. S. Aust. **67** 2 1943 p. 177 pl. xxii.

Ovinotis **gen. nov.** Haliotidae, type *Haliotis ovina* Gmelin 1791 habitat? B. C. COTTON Trans. roy. Soc. S. Australia **67** 2 1943 p. 179.

†*Semicircularea* **gen. nov.** Cyrtolitidae type *S. semiphira* (Lockman) Upper Cambrian Pilgrim formation Big Snowy Mts., Montana, p. 44, *S. semilunensis* **sp. nov.** p. 45 pl. 8 f. 47, 48, LOCHMAN & DUNCAN Spec. Pap. Geol. Soc. Amer. **54** 1944.

†*Semicircularea arcuata* **sp. nov.** Up. Cambrian Pilgrim formation, Three Forks Quad. Big Snowy Mts., Montana, LOCHMAN & DUNCAN Spec. Pap. Geol. Soc. Amer. **54** 1944 p. 81 pl. 12 f. 22–27.

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†*Calliostoma* (*Eutrochus*) *claiborniannum* **sp. nov.** Gosport sand, Claiborne, U.S.A., K. van W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 4 pl. 2 f. 4–6.

†*Cirsonella amplector* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 304 pl. 45 f. 24.

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†*Nerita* ? *minnesotensis* **sp. nov.** Coleraine formation (Cretaceous) S. face of Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9 *25* pl. 11 f. 12–14, 20, 21.—†*N. jayanca* **sp. nov.** Tortuga, Upper Senonian, Paita, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175), *67* (*225*) pl. 9 (16) f. 6, 7.

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Torrella (*Torrella*) *emmae* **sp. nov.** Coliseo, Matanzas, M. L. JAUME & L. S. DE FUENTES Rev. Soc. Malac. C. de la Torre Habana **1** 1 1943 p. 32 pl. 5.

Tudora (*Wrightudora*) *enode brevilabris* **subsp. nov.** Cueva del Chombo, Bocas Gibara, C. G. AGUAYO Rev. Soc. Malac. C. de la Torre Habana **1** 2 1943 p. 71 pl. 10 f. 2.—*T.* (?) *gibarana* **sp. nov.** 'La Vigia 6 km. s. of Gibara, Oriente, p. 72 pl. 10 f. 1, C. G. AGUAYO Rev. Soc. Malac. C. de la Torre Habana **1** 2 1943.

RISSOACEA.

Amnicola limosa (Say), *A. Augustina* Pilsbry, *A. sanctijohannis* Pils., *A. floridana* Frauenfeld, *A. olivucea* Pils., Coosa River operculates, C. GOODRICH **148**; *A. bithynoides*, p. 103 f. 5, T. C. YEN **425**.

Bythinella dunkeri Frauen., *B. viridis* (Poiret), *B. abbreviata* Michaud, figs., W. ADAM **3**.

†*Calipyrgula hibbardi* **sp. nov.** Laverm formation, Lower Pliocene, half m. west of Gate, Beaver County Oklahoma, A. B. LEONARD & D. S. FRANZEN Univ. Kansas Sci. Bull **30** 1 1944 pp. 19 pl. iv f. 7; *C. turricula* **sp. nov.** Laverm formation, 3½ m. S. of Gate, Beaver County, Oklahoma, A. B. LEONARD & D. S. FRANZEN Univ. Kansas Sci. Bull. **30** 1 1944 p. 20 pl. iv f. 4; *C. tumida* p. 20 pl. iv f. 9; *C. senta* p. 21 pl. iv f. 8; **spp. nov.** Laverm formation (Lower Pliocene) S. of Gate, Beaver

County, Oklahoma, A. B. LEONARD & D. S. FRANZEN Univ. Kansas Sci. Bull. **30** 1 1944 p. 15 pl. iv.

Cingula eyerdami Willett, range extended 200 m. W., W. J. EYERDAM **132.**

Clappia umbilicata (Walker), Coosa River, C. GOODRICH **148.**

"*Epigrus*" *pakaurangia* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 305 pl. 45 f. 33.

Fijianella **gen. nov.** Synceridae, type *F. calciphila* **sp. nov.** Law Islands, Yangasa Leon pp. 257, 258 f. 7, *F. laddi* sp. nov. p. 259 f. 8, Law Islands Navutu Homa, *F. cornucopia* p. 260 f. 8 b, Law Islands Navutu Homa, C. M. COOKE Jr. & W. J. CLENCH Occ. Pap. Bishop Mus. Honolulu **17** 20 1943.

†*Fluminicola weaveri* p. 105 f. 6, T. C. YEN **425.**

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Marstoniopsis steinii Marts.; fig., W. ADAM **3.**

Paladilhiopsis leruthi **sp. nov.** Höhle von Varnitza bri Bàilza im Bezirk Vaseàu, Dep. Bihor (Behar), C. R. BOETTGER Bull. mus. roy. Hist. nat. Belg. **16** 42 1940 p. 13 pl. ii f. 7.

Planorbis (*Australorbis glabratus*), Biology Plate, E. BRUMPT **69.**

Pomatiopsis lapidaria (Say) spermatozoa, T. M. WOODWARD **421.**

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†*Pyrgulopsis carinata* p. 103 f. 1, T. C. YEN **425.**

Rapanella type *andersoni* **gen.** et **sp. nov.** Synceridae—Rapa id.; Maitua below Mt. Mangaoa, C. M. COOKE, Jr. & W. J. CLENCH Occ. Pap. Bishop Mus. Honolulu **17** 20 1943 pp. 253, 254 fig. 3.

†*Scalaronoba* chemnitzia **sp. nov.** Pakaurangi Point, Kaipara, New Zealand C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 305 pl. 45 f. 30.

Somatogyrus coosaensis Walker, *S. crassus* Walker, *S. names* Walker, *S. pygmaeus* Walker; *S. hinkleyi* Walker, *S. decipiens* Walker, *S. constrictus* Walker, *S. aureus* Tryon, *S. georgianus* Walker, *S. hendersoni* Walker, *S. obtusus* Walker, Coosa River, C. GOODRICH **148.**

Stalion agnia **sp. nov.** Tortuga, Upper Senonian, Paita, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175) *68* (*226*) pl. 10 (17) f. 1–3.

†*Vitrinella blakei* **sp. nov.** Talbot formation (Pleistocene) Wailes Bluff, near Cornfield Harbor, St. Mary's Co., Maryland, H. A. REHDER Nautilus **57** 3 1944 p. 97 pl. 9 f. 1, 2.

†*Zaclys violator* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 306 pl. 45 f. 94.

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Anculosa of the Coosa River, C. GOODRICH **150.**

†*Architectonica* (*Granosolarium*) *meekana splendida* **var. nov.** Lower Claiborne, Sabine River, Texas side, K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 14 (318).—*A.* (*Granosolarium*) *texcarolina* **sp. nov.**, Claibornian U.S.A., K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 15 (319), pl. 1 (25) f. 8–11.—*A. sabinia* **nom. nov.** for *Solarium delphinuloides* Heilprin 1880, Acad. Nat. Sci. Philad. 32 p. 375 pl. 2 f. 13, non Orb. 1845 in Meyer 1887, K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 17 (321).

Cerithium vertagus (L.) designated by Montfort as genotype of C., R. R. COMPTON **98**; *C. ferrugineum* Say eggs and larvae, M. V. LEBOUR **237.**

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Clava Martyn and *Cerithium* Bruguière, R. R. Compton **98.**

†*Dalliella neozelanica* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 305 pl. 45 f. 31.

†*Diplocyma* p. 411 **gen. nov.** Cerithiidae type *D. whiteri* **sp. nov.** p. 412 ; *D. sucionis* **sp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc, Bogota **4** 15–16 1941.

†*Glauconia cordalis* **sp. nov.** Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175) *79* (*237*) pl. 15 (22) f. 13.

†*Glorioclava* **gen. nov.** pp. 6 (164) *85* (*243*) type *G. inca* **sp. nov.** 17 (175) *86* (*244*) pl. 12 (19) f. 13. Tortuga, Upper Senonian, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

Goniobasis of the Coosa River, C. Goodrich **150.**

†*Goniobasis miocaenia* **sp. nov.** Miocene Burkeville, Newton County, Texas, H. B. Stenzel & F. E. Turner Amer. J. Sci. New Haven **242** 6 1944 p. 295 pl. 1 f. 18–22 ; †*G. coombsi* **nom. nov.** for *Goniobasis olequahensis* Weaver & Palmer non *Ambloxus olequaensis* Arnold & Hannibal. (=*Goniobasis olequaensis* (A. & H.)). C. Weaver Publ. Geol. Univ. Washington **5** 2 1942 [1943] p. 375 pl. 75 f. 6, 7, 11, 12.

Gyrotoma of the Coosa River, C. Goodrich **150.**

†*Hemisinus* (*Longiverena*) *avus* p. 145 pl. 11 f. 27–29 ; *H. pictus* p. 146 pl. 11 f. 30 ; **spp. nov.** Tertiary, about 1 m. from the Quebrada Sungarillo, Pachitea River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 ; *H. sigmachilus* p. 412, *H.* (*Basistoma*) *corrosensis* p. 413 ; *H.* (*Longiverena*) *mugrosanus* p. 413 ; *H.* (*L.*) *encosmius* p. 413 ; *H.* (*L.*) *hopkinsi* p. 414 ; *H.* (*L.*) *laciranus* p. 414 ; *H.* (*L.*) *waringi* p. 414 ; *H.* (?) *gracillimus* p. 414 ; *H.* (*Verena*) *avus*, p. 414 ; *H.* (*V.*) *lavicarina* 415, **spp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15–16 1941.

Iddingsella **nom. nov.** for *Iddingsia* Olsson 1929 non Walcott (Trilobita) 1924, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 6 (164).

Lepyrium showalteri (Lea), Coosa R., C. Goodrich **150.**

Litiopa melanostoma Rang, eggs and larvae, M. V. Lebour **237** ; *L. melanostoma* Rang, a correction of distribution, K. v. W. Palmer **303.**

†*Melanatria medialis* **sp. nov.** Tortuga Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175) *78* (236) pl. 12 (19) f. 8, 11.

†*Mesalia janja* **sp. nov.** La Mesa Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175), *68* (*226*) pl. 10 (17) f. 1–3 ; *M. scotti* **sp. nov.** = *M. scotti* Rutsch (in Kugler) Bol. Geol. Min. Caracas **2** p. 13, R. Rutsch Ecl. geol. helv. **36** 2 1943 p. 159 pl. 4 f. 1, 2.

Modulus modulus L., *carchedonius* Lk. *M. catenulatus* Philippi Isla de Puná, Guayaquil, Ecuador, selected as type locality, R. T. Abbott **1** ; *M. modulus* Gray egg and larvae, M. V. Lebour **237.**

†*Nodifaunus* **gen. nov.** pp. 6, 164, *83* (*241*), Potamididae type *N. nodosus* **sp. nov.** pp. 17 (175), *84* (*272*) pl. 12 (19) f. 6, 7, 10, 12 ; *N. costatus* pp. 17 (175), *85* (*243*) pl. 12 (19) f. 9, 14, **spp. nov.** Tortuga Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

†*Parinana* **gen. nov.** Cerithiidae type *Morgana magma* Woods (Eocene) pp. 6 (164), *89* (*247*) pl. 15 f. 14 ; *P. americana* **sp. nov.** Tortuga, Paita District, Peru, pp. 90 (248) pl. 12 f. 4, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

†*Pilsbryus* **gen. nov.** Thiaridae type *Lithasia antiqua* Gabb 1865 p. 105 f. 7 ; *P. superbus* **sp. nov.** Idaho formation, Hammett, Idaho p. 105 f. 8, T. C. Yen J. Paleont. Menasha, Wis. **18** 1 1944.

†*Pleurocera acutum burkevillense* **subsp. nov.** Miocene, Texas, H. B. Stenzel & F. E. Turner Amer. J. Sci. New Haven **243** 6 1944 p. 293 pl. 1 f. 7–12 ; *P.* of the Coosa River, C. Goodrich **150.**

Plotiopsis flata Mooki R. ; *P. thrascia* Tebooburra, Bulloo R., **spp. nov.**, New South Wales, T. Iredale Aust. Nat. Sydney **11** 5 1944 p. 117 text-fig. 5.

Potamanax Pils., C. G. Aguayo **21**.

†*Potamides mcgilli* **sp. nov.** Tertiary Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15–16 1941 p. 411.

†*Previcarya* **gen. nov.** Potamididae pp. 6 (164), *86* (*244*), type *P. peruviana* **sp. nov.** pp. 17 (175), *87* (*245*) pl. 12 (19) f. 1–3. Cretaceous, Paita District, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

†*Pyrazus peruvianus* **sp. nov.** Tortuga, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175), *83* (*241*) pl. 13 (20) f. 12.

†*Rhinotamides* **gen. nov.** Potamididae type *R. rudis* **sp. nov.** Tortuga, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 17 (175) *81* (*239*) pl. 13 (20) f. 9, 13.

†*Sechuritella* **gen. nov.** pp. 5 (163), *76* (*234*), Turritellidae type *S. terebracincta* **sp. nov.** p. *77* (*235*), pl. 11 (18) f. 7, 8, 10, 11, 14; *S. chacapoya* p. *77* (*235*) pl. 11 (18) f. 4, 13; **sp. nov.**; Upper Senonian, Paita Peninsula, Northern Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 17 (175).

†*Semivertagus illingi* Marae quarry (Paleocene) Trinidad, R. Rutsch Ecl. geol. helv. **36** 2 1943 p. 166 pl. iii f. 10.

†*Serratocerithium*, raised here to generic rank, *usanium* **sp. nov.** Paleocene (Cenozoic) ridge east of Santa Ynez Canyon 4 m. E. of road in canyon, gray calcareous sandstone, R. R. Compton J. Paleont. Menasha, Wis. **18** 5 1944 p. 466 pl. 78, f. 3, 5, 6; †*S. usanium* **sp. nov.** (Cenozoic) Santa Monica Mountains, California, R. R. Compton J. Paleont. Menasha, Wis. **18** 5 1944 pp. *464*, 466 pl. 78 f. 3, 5, 6.

†*Spirolaxis cohaerentia* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 308 pl. 44 f. 22.

†*Sympanotomus* **gen. nov.** Potamididae type *S. muricatus* **sp. nov.** Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 17 (175), *82* (240) pl. 13 (20) f. 4.

†*Thianassa* **gen. nov.** Potamididae type *T. ciconia* **sp. nov.** Tortuga, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 17 (175), *80* (*238*) pl. 13 (20) f. 5.

†*Thiara aldrichi* **sp. nov.** Gosport Sand, Claiborne, Alabama, K. v. W. Palmer Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 7 (311) pl. 2 (26) f. 7, 8.

†*Tortucerithium* **gen. nov.** Cerithiidae type *Tortucerithium textilis* **sp. nov.** Tortuga (Cretaceous) Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 17 (175), *88* (*246*) pl. 13 f. 1–3.

†*Trocotaulax* **gen. nov.** Potamididae pp. 5, 163, *79* (*237*) type *T. elegans*, **sp. nov.** pp. 17 (175), *80* (238) pl. 13 (20) f. 6–8. Tortuga, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

†*Turritella lama* p. *70* (*228*) pl. 10 (17) f. 5, 8, 10; *T. sapora* p. *71* (*229*) pl. 10 (17) f. 4, 7, 9, 11, 12; **spp. nov.** Tortuga; *T. prechira* p. *72* (*230*) pl. 10 (17) La Mesa; *T. ceiba* p. *72* (*230*) pl. 11 (18) f. 6, 15; *T. inuya* p. *73* (*231*) pl. 13 (20) f. 10, 11; *T. prelissoni* p. *73* (*231*) pl. 16 (23) f. 2; *T. desolata* p. *74* (*232*) pl. 15 (22) f. 45; *T. curtsia* p. *75* (*233*) pl. 15 (22) f. 9; Pan de Azulay, *T. parinensis* p. *75* (*233*) pl. 11 (18) f. 1, 2, 12 Parinas Point; **spp. nov.** Upper Senonian Paita Peninsula Northern Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 17 (175); †*T. saposa austera* **subsp. nov.** Upper Cretaceous Pachitea River, opposite Isla de Chonta, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 139, pl, 9, f. 5, 6, 7; *T. trina*, f. 25; *T. surayaquillana* f. 24; **spp. nov.** Upper Cretaceous Sarayaquillo River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 141 pl. 10.

†*Woodsalia paitana* **sp. nov.** p. *69* (*227*) pl. 11 (18) f. 5; *W. p. robusta* **subsp. nov.** p. *70* (228) pl. 11 (18) f. 3, 9; Tortuga, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 17 (175).

AMALTHEACEA.

†*Hipponix vagus* **sp. nov.** Gosport Sand, Claiborne, Alabama, K. van W. Palmer Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 6 (310) pl. 2 (26) f. 1–3.

†*Zeradina* (*Naridista*) *escalenta* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 304 pl. 45 f. 27, 28.

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Crepidula onyx sexual differentiation, figs ; *Crepidula plana* sexual differentiation, figs., W. R. COE **95** ; *C. fornicata* fig., I. HESSLAND **170.**

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Desmaulus **subgen. nov.** [Calyptraeidae] genotype [sic] *Calyptraea extinctorium* (Lamarck) Blainville (Man. de Malac. 1825 pl. 48 bis. fig. 8, H. A. REHDER Proc. biol. Soc. Washington **56** 1943 p. 45.

†*Sigapatella otamatea* **sp. nov** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc, N.Z. **73** 4 1944 p. 306 pl. 44 f. 25.

STROMBACEA.

†*Anchura grouti* **sp. nov.** Conglomerate of Coleraine formation, Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha Wis. **18** 1 1944 pp. 10–27 pl. xi f. 2–5 ; *A. pacifica* **sp. nov.** Cretaceous Paita District, Peru, H. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175), *92* (*250*) pl. 14 f. 1. *A. falciformis* (Gabb), J. A. TAFF, G. D. HANNA & C. M. CROSS **386.**

†*Balcis collator* **sp. nov.** Pakaurangi Point, Kaipara, N.Z., C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 309 pl. 44 f. 19.

†*Orthostrombus* **subgen. nov.** of *Perustrombus* type *P.* (*O.*) *tortugensis* **sp. nov.** Cretaceous Tortuga, Paita District, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 17 (175), *95* (*253*) pl. 14 f. 5, 6.

†*Perustrombus* **gen. nov.** Strombidae type *P. wheeleri* **sp. nov.** Cretaceous Paita District, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164) 17 (175) *94* (*252*) pl. 14 f. 1–3.

†*Rimella henrywoodsi* **sp. nov.** Upper Cretaceous, Sarayaquillo River, Peru, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 140 pl. 10 f. 20, 20a.

Strombus pugilis Lk. fig., E. A. MARTINS **276.**

†*Torgnellus* **gen. nov.** Strombidae type, *T. peruvianus* **sp. nov.** Cretaceous Paita District, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164) 17 (175), *92*, *93* (*250*, *251*) pl. 14 f. 7, 8.

NATICACEA.

†*Ampullina breccia* p. 97 (255) pl. 9 f. 2–4 ; *A. tortuga* p. 97 (256) pl. 9, f. 1 ; *A. cumara* p. 97 (256) pl. 9 f. 5 ; **spp. nov.** Tortuga lower zone (Cretaceous), Paita District, Peru. A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 17 (175).

†*Ectinochilus texanum cherokense* **nom. nov.**, for *Rimella texanum* var. *plana* Harris 1895 Ac. N. Sci. Phil. **47** p. 78 = *Ectinochilus texanus planus* (Harris) Palmer 1937, K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 18 (322).

†*Etremopsis duospiralis* p. 311 (pl. 44 f. 17 ; *E. disposita* p. 311 pl. 45 f. 32, **spp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944,

†*Gyrodes pachiteanus* f. 3, 3a ; *G. singewaldi* f. 1, 1a, b, 2 ; **spp. nov.** Pachitea River, opposite the Isla de Chonta, Upper Cretaceous, Peru, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 138 pl. 9.

†*Kaiparanura* **gen. nov.** Cominellidae type *Phos spiralis* Marshall 1918, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 309.

†*Latirogona* **gen. nov.** Fasciolariidae type *Dolicholatirus ornatus* Marshall 1918, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 309.

Natica canrena L. eggs and larvae, M. V. LEBOUR **237.**

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Lamellaria koto **sp. nov.** on tide flats near Braidenton Beach, Florida, J. SCHWENGEL Nautilus **53** 1 1944 p. 17 pl. 1 f. 3–6, 6a.

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Casmaria atlantica **sp. nov.** Puerto Sosúa Hispaniola, W. J. CLENCH Johnsonia Harvard **1** 16 1944 p. 2 pl. 1 f. 1, 2; *C. atlantica* in Cuba, M. L. JAUME **203**.

Cassis madagascariensis spinella **subsp. nov.** Tortugas, Florida, W. J. CLENCH Johnsonia Harvard No. 16, p. 15 pl. 8; *C. tuberosa* L. *flammea* L. *madagascariensis* Lk. figs., W. J. CLENCH **85**; *C. tuberosus* Lk. fig., E. A. MARTINS **276**.

Cymatium chlorostomum Lk. eggs and larvae, M. V. LEBOUR **237**.

†*Cymatium etheringtoni* **sp. nov.** Cowlitz formation, Upper Eocene, Lower Cowlitz Valley, Washington, C. WEAVER Publ. geol. Univ. Washington **5** 2 1942 [1943] p. 413 pl. 82 f. 2, 3, 10.

Galeodea coronadoi Crosse figs. W. J. CLENCH **85**.

†*Gyrineum mackini* **sp. nov.** Lincoln formation, middle Oligocene, Grays Harbor area, Washington, C. WEAVER Publ. geol. Univ. Washington **5** 2 1942 [1943] p. 424 pl. 84 f. 2, 9.

Phalium granulatum Born, *cicatricosum* Meuschen, figs., W. J. CLENCH **85**.

Tonna perdix L. eggs and larvae, W. V. LEBOUR **237**.

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EPITONIACEA.

†*Acrilla kaiparaensis* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 307 pl. 44 f. 16.

†*Epitonium* (*Crisposcala*) *failianum* **sp. nov.** Jacksonian or Claibornian U.S.A., K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 5 (309) pl. 2 (26) f. 9, 10; †*E.* (*Gyroscala*) *meglameriae* **sp. nov.** Lower Claiborne 2 m. S. of Gilbertown, Alabama, K. v. W. PALMER Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 6 (310), pl. 2 (26) f. 11, 13.

L. [*enameria*] *epicropa* Murrumbidgee; *L. formalis* Gun Innes; *L. digressa* Belubula; *L. calda* "out of a hot spring"; *L. placata* Bombala, New South Wales, **spp. n.**, T. IREDALE Aust. Nat. Sydney **11** 5 1944 p. 121.

†*Pliciscala komitica* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 306 pl. 44 f. 15.

PYRAMIDELLACEA.

†"*Graphis*" *problanda* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 308 pl. 44 f. 14.

Melanella acicula Gld. eggs and larvae, M. V. LEBOUR **237**.

Odostomia quinta Moomomi, Molokai p. 64 pl. 2 f. 3; *O. margarita* Eastern Loch of Pearl Harbour p. 65 pl. 2 f. 4; *O. monaulax* Eastern Loch of Pearl Harbour p. 65 pl. 2 f. 5; *O. hiloensis* Hilo, Hawaii p. 65 will be fig. in next Nautilus, **spp. nov.** Hawaiian Islands, H. A. PILSBRY Nautilus **58** 2 1944.

Orinella vanhyningi **sp. nov.** Big Bayou, St. Petersburg, Florida, P. BARTSCH Nautilus **57** 3 1944 p. 106 pl. 9 f. 3.

Pseudomelania simplex **sp. nov.** Upper Senonian Paita, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175) *66* (*224*) pl. 12 (19) f. 17.

Thyonicola type *mortenseni* **gen.** et **sp. nov.** parasitic on Holothurian *Thyone serrata* Britten Java Sud-Africa Exped., G. MANDAHI-BARTH Vidensk. Medd. naturf. Foren. Kjøb. **104** 1941 pp. 341, 342 text-figs.

STENOGLOSSA.

(α) RHACHIGLOSSA.

MURICACEA.

Columbarium formosissimum Tomlin, *hedleyi* Iredale *natalense* Tomlin, *pagoda* Lesson, *radiale* Watson *pagodoides* Watson, *spinicinctum* Martens *trabeatum* Iredale [spp. extra Western Atlantic], W. J. CLENCH **84**; *C. bermudezi* Clench and Aguayo, *atlantis*

Cl. & Ag., *bartletti* Cl. & Ag., *sarissophorum* Watson, figs., W. J. Clench **84**.

Ocinebra nuceus Mörch eggs and larvae, M. V. Lebour **237**.

Thais fasciata Rve. eggs and larvae, M. V. Lebour **237**.

Trophon varians Orb. figs., A. Carcelles **75**.

Typhinae Catalogue and revision of the subfamily, A. M. Keen **217**.

Urosalpinx cinerea, food selection, H. Heskin **166**; *U. cinerea* fig., I. Hessland **170**.

BUCCINACEA.

Argobuccinum oregonensis action of cyanide on respiration of the larvae, W. Robbie **353**.

Azorinus, note on name, H. A. Rehder **339**.

†*Buccinofusus turneri* **sp. nov.** Lower Umpqua formation, middle Eocene, Southwestern Oregon, C. Weaver Publ. Geol. Univ. Washington **5** 2 1942 [1943] p. 440 pl. 89 f. 1, 2; pl. 101 f. 13.

Buccinum canetae **sp. nov.** off Habana, Cuba, W. J. Clench & C. G. Aguayo Rev. Soc. Malac. "Carlos de la Torre" Habaña **2** 2 1944 p. 67 text-figs.; *B. undatum*, J. Johansson **214**.

Busycon carica (Gmelin) variation of number of rows of spines, A. G. Hackney **162**; *B. perversum* albino, a white shell only, A. G. Hackney **163**; *B. contrarium*, B. Smith **368**.

Cantharus vibex marjoriae **subsp. nov.** Panama Bay, Maxwell Smith Nautilus **58** 1 1944 p. 28.

Chrysodomus saturus Martyn range extended 3,000 m. W., W. J. Eyerdam **132**.

Fasciolaria sechura **sp. nov.** Cretaceous, Paita Region, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 18 (176), *100* (258) pl. 15 f. 3, 10; *F. distans* Lam. defensive action against *Urosalpinx*, A. G. Hackney **161**.

†*Fusinus ? corbis* **sp. nov.** Cretaceous Paita Region, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **58** 111 1944 pp. 18 (176), *101* (*259*) pl. 9 f. 15.

Latirus tribulus **sp. nov.** Cretaceous, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 18 (176), *100* (*258*) pl. 15 f. 1.

†*Molopophorus effingeri* **nom. nov.** for *M. bramkampi* Effinger July 1938 non Clark & Anderson June 1938, C. Weaver Publ. Geol. Univ. Washington **5** 2 1942 [1943] p. 465 pl. 90 f. 2, 3.

Neptunea antiqua, W. Johansson **214**.

Neptunea teglandae **nom. nov.** for *Ancistrolepis clarki* Tegland 1933, non *Neptunea* (*Neptunea*) *clarki* (Meek)= *Chrysodomus clarki* Meek 1923, C. Weaver Publ. Geol. Univ. Washington **5** 2 1942 [1943] p. 427 pl. 84 f. 8, 14.

Phos clarki **sp. nov.** Panama Bay, Maxwell Smith Nautilus **58** 1 1944 p. 27 pl. 1 f. 2.

Pollia tincta Conr. eggs and larvae, M. V. Lebour **237**.

†*Priscoficus johnstoni* **sp. nov.** Marae quarry (Falcocene), Trinidad. R. Rutsch Ecl. geol. helv. **36** 2 1943 p. 173 pl. v f. 2.

†*Rhombopsis* [=*Neptunella*] *meridionalis* **sp. nov.** Tortuga, Lower zone (Cretaceous), Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 18 (176), *99* (*257*) pl. 15 f. 1, 2.

†*Searlesia chatwini* **sp. nov.** Pleistocene Cranstal Point, Isle of Man, A. S. Kennard Proc. Malac. Soc. London **26** 2-3 1944 p. 65.

†*Umpquaia* **gen. nov.** Neptuniidae type *U. oregonensis* Turner **sp. nov.** Eastbank of Little River, Douglas Co., Oregon (Upper Umpqua formation, Middle Eocene), Turner Geol. Soc. Amer. Spec. Pap. No. 10 1938 pp. 79, 80 pl. 16 f. 20, 21 [omission].

Volutopsius fragilis Dall, extended range, 200 m. W., W. J. Eyerdam **132**.

Zozia note on name, H. A. Rehder **339**.

VOLUTACEA.

†*Coptostoma rameum* **sp. nov.**= *Bonellitia ulmula* Palmer 1937 non *Cancellaria ulmula* Harris 1895 Cook Mt., Burleson Co., Texas, K. v. W. Palmer Bull. Amer. Paleont. Ithaca **28** 112 1944 p. 19 (323) pl. 1 (25) f. 3.

†*Lyria maracensis* **sp. nov.** Marae quarry (Paleocene), Trinidad, R. Rutsch Écl. geol. helv. **36** 2 1943 p. 179 pl. iii f. 9; *L. coucha* **sp. nov.** Cretaceous Paita Region, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 18 (176), *103* (261) pl. 15 f. 6, 7.

Melo miltonis Gray, egg capsules, B. C. Cotton **105.**

†*Mitricaulus* **gen. nov.** (near Mitridae or Turridae) type *M. incarum* **sp. nov.** Tertiary, Pachitea River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 142 pl. 10 f. 13–18.

†*Persicula chehalisensis* **sp. nov.** Lincoln formation, middle Oligocene, Grays Harbor County, Washingtoo, C. Weaver Publ. Geol. Univ. Washington **5** 2 1942 [1943] p. 495 pl. 94 f. 14.

†*Voluta inca* **sp. nov.** Cretaceous, Paita Region, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 18 (176), *103* (261), pl. 9 f. 8.

† *Volutocorbis meridionalis* **sp. nov.** Cretaceous, Paita Region, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 18 (176), *102* (*260*) pl. 9 f. 14.

Xancus pyrum (L.) bionomics, D. W. Devanesen & P. I. Chacko **115.**

Stenoglossa.

(β) Toxoglossa.

CONACEA.

†*Anacithara janjukiensis* **sp. nov.** Table Cape, Tasmania, Lower Miocene A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 58 pl. 5 f. 10.

†*Antiplanes major* **sp. nov.** dredged off Bodega Head, 62 fms., P. Bartsch Proc. biol. Soc. Washington **57** 1944 p. 29.

†*Apiotoma balcombensis* Balcombe Bay, Victoria (Balcombian) Middle Miocene p. 20 pl. vii f. 10; *A. pritchardi* Torquay, Victoria Janjukian, Lower Miocene p. 20 pl. 3 f. 7; *A. chapplei* Balcombe Bay, Victoria, Middle Miocene p. 21 pl. 3 f. 6, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Asperdaphne balcombensis* Balcombe Bay, Victoria, Middle Miocene p. 59 pl. 6 f. 7; *A. contigua* Altona Bay, Victoria, Middle Miocene p. 60 pl. 6 f. 8; *A.* (*Aspertilla*) **subgen. nov.** [q.v.] *exsculpta* Abattoirs Bore, Middle Pliocene p. 60 pl. 6 f.9, **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Aspertilla **subgen. nov.** of *Asperdaphne*, type *Drillia legrandi* Beddome 1883 Tasmania, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 60.

†*Austroclavus glaber* Balcombe Bay p. 40 f. 1; *A. teres* Muddy Creek p. 40 f. 3; *A. brevicaudalis* Balcombe Bay p. 40 f. 2; *A. lygdinopsis* Muddy Creek p. 41 f. 4; **spp. nov.** Middle Miocene, Victoria, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 pp. 40, 41 pl. 2.

†*Austrotoma inexpectata* p. 23 pl. 7 f. 6, 7, Table Cape, Tasmania (Janjukian) Lower Miocene; *A. janjukiensis*, Spring Creek, Victoria (Janjukian) Lower Miocene p. 24 pl. 3 f. 1; **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Belatomina clathrata* **sp. nov.** Muddy Creek, Lower beds, Victoria, Balcombian, Middle Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 25 pl. 7 f. 9.

†*Borsonia torquayensis* pl. 1 f. 11, Torquay, Victoria; *B. tatei* pl. 3 f. 8, Spring Creek, Victoria; **spp. nov.** Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 42.

Burchia **gen. nov.** Turridae type *Pseudomelatoma semiinflata redondoensis* Burch = *Burchia redondoensis* (Burch, G. of Panama 511 fms.) [raising subsp. to specific rank] genus also to include *Burchia clionella* (Dall) (= *Leucosyrinx* ? *clionella* Dall), P. Bartsch Nautilus Philad. **57** 4 1944 p. 115.

†*Comitas* (*Carinacomitas*) *aldingensis* **sp. nov.** Aldinga, lower beds, South Australia (Janjukian) Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 pl. 18 pl. 1 f. 7; †*C. torquayensis* p. 17 pl. 3 f. 9, Victoria; *C. pseudoclarae* p. 18 pl. 1 f. 6, **spp. nov.** Torquay, lower blue clay (Janjukian). Lower Miocene, Victoria, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Conus clenchi **sp. nov.** Barro do Furado, Municipio de Campos, State of Rio de Janeiro, Brazil at the shore-line, E. A. Martins Boll Mus. Nac. Rio **12,** 1943 pp. 2, 6 text-figs; *C. eugrammatus* p. 85, off N. Coast of Molokai, near

Mokapa Inlet; *C. Lammatus* p. 86, near Kauai Island in 253–279 fms.; *C. spiceri* p. 87, on Sand Island, midway to atoll; *C. smirna* p. 87, near Kauai 257–312 fms.; *C. halitropus* p. 88 at a dredger dump, Honolulu, P. Bartsch & H. A. Rehder Proc. biol. Soc. Washington **56** 1944; *C. verrucosus vanhyningi* **subsp. nov.** Pompano, Broward Co., Florida, H. A. Rehder Nautilus **57** 3 1944 p. 106; *C. mus* Brug. eggs and larvae, M. V. Lebour **237**; *C. cormacki* **sp. nov.** (Eocene) Santee Cooper Canal, 17 m. N.W. of Moncks Corner, South Carolina, A. Harbison Notulae Naturae Philad. **143** 1944 p. 6 pl. 3 f. 2.

†*Coronasyrinx* **gen. nov.** Cochlespirinae, Turridae type *C. venusta* **sp. nov.** Torquay, Victoria (Janjukian) Lower Miocene p. 22 pl. 1 f. 1; *C. semiplana* **sp. nov.** Aldinga, lower beds., South Australia, Lower Miocene (Janjukian) p. 22 pl. 1 f. 2, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Cryptoborsonia* **gen. nov.** Turridae type *C. pleurotomella* **sp. nov.** Balcombe Bay, Victoria, Middle Miocene p. 43 pl. 1 f. 12; *C. eugobela* **sp. nov.** Torquay, Victoria, Lower Miocene p. 43 pl. 1 f. 13, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Daphnella chapplei* **sp. nov.** Muddy Creek, Victoria, Middle Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 59 pl. 6 f. 6.

Drillia umbilicata Gray (1838, A.M.N.A. **1** p. 28), figd. (genotype), P. Bartsch **43.**

†*Etrema janjukiensis* Table Cape, Tasmania p. 52 pl. 5 f. 1; *E. granolirata* Balcombe Bay, Mornington, Victoria, Middle Miocene p. 52, pl. 5 f. 3; *E. gippslandensis* Gippsland Lakes, Victoria, Lower Pliocene p. 54 pl. 5 f. 2; *E. exsculpta* Altona Bay, Victoria, Middle Miocene p. 54 pl. 5 f. 4; *E. mirabilis* Curdie's River, near Peterborough, Victoria, Lower Pliocene p. 54 pl. 5 f. 5; **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944

†*Etremopsis opposita* Altona Bay, Victoria, Middle Miocene p. 55 pl. 5 f. 7; *E. contigua* Abattoirs Bore, Adelaide, Middle Pliocene p. 55 pl. 5 f. 6; **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Fenestrodaphne* **gen. nov.** p. 60 Turridae type *F. pulchra* **sp. nov.** Adelaidean, Lower Middle Pliocene, Abattoirs Bore, Adelaide p. 61 pl. 6 f. 10, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Filodrillia turricula* Balcombe Bay, Mornington, Victoria, Middle Miocene p. 56 pl. 5 f. 8; *F. ludbrookae* Abattoirs Bore, Adelaide, Middle Pliocene p. 57 p. 5 fig. **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Guraleus* (*Paraguraleus*) *finlayi* Torquay, Victoria, Lower Miocene p. 50 pl. 5 f. 12; *G.* (*P.*) *balcombensis* Balcombe Bay, Victoria, Middle Miocene p. 50 pl. 5 f. 13; *G.* (*P.*) *abbreviatus* Abbatoirs Bore, Adelaide p. 50 pl. 5 f. 11; *G.* (*P.*) *incisus* Abattoirs Bore p. 51 pl. 5 f. 14.—†*G. chapplei* p. 47 pl. 4 f. 1, Abattoirs Bore, Adelaide, S. Australia, Lower Mid Pliocene; *G. ludbrookae* p. 47 pl. 4 f. 3; Abattoirs Bore, Lower Mid. Pliocene; *G. janjukiensis* p. 47 pl. 4 f. 2, Torquay, Victoria, Lower Pliocene; *G. harrisi* p. 48 pl. 6 f. 15, Muddy Creek, Victoria, Middle Miocene; *G. singletoni* Forsyth's Grange Burn, Victoria, Lower Pliocene p. 48 pl. 6 f. 14; *G. adelaidensis* p. 49 pl. 6 f. 13 Abattoirs Bore, Adelaide; **spp. nov.** S. Australia, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Gemmula barksdalei* **sp. nov.** Cowlitz formation, Upper Eocene, Lower Cowlitz Valley, Washington, C. Weaver Publ. Geol. University, Washington **52** 1942 [Dec. 1943] p. 523 pl. 97 f. 20, 21.

†*Heterocithara miocenica* **sp. nov.** Balcome Bay, Victoria, Middle Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Imaclava **gen. nov.** Clavinae type *I. ima* **sp. nov.**. San Lucas Cove, Lower California, P. Bartsch Proc. biol. Soc. Washington **57** 1944 p. 26.

Imaclava pembertoni (Lowe) type of *Imaclava*, not *I. ima* Bartsch, P. Bartsch **48.**

Inodrillara, p. 104 **subgen. nov.** of *Inodrillia*, type *I.* (*I.*) *miamia* **sp. nov.** off New Cut, Miami, Florida p. 110 pl. 9 f. 9; pl. 11 f. 3; pl. 12 f. 5; with *Pleurotoma dalli* Verrill & Smith 1882; *Drillia aepynota* Dall 1889; *I.* (*I.*) *martha*=*Pleurotoma dalli* V. & S. in

part p. 107 pl. 12 f. 3; *I.* (*I.*) *hatterasensis* off Cape Hatteras p. 109 pl. 8 f. 9 pl. 9 f. 7, pl. 12 f. 4; *Inodrillia* (*Inodrillara*) *avira* off Fowey Light, E. by N. in 100 fms. p. 113 pl. 9 f. 3, pl. 11 f. 6 pl. 13 f. 5; *I.* (*I.*) *acova* off Sambo Reef, Florida, in 110 fms., p. 115 pl. 9 f. 1 pl. 11 f. 2, pl. 15 f. 8; *I.* (*I.*) *vetula* off Key West, Florida, p. 116 pl. 9 f. 2, pl. 11 f. 1, pl. 15 f. 9; *I.* (*I.*) *gibba* off Western Dry Rocks in 80 fms. pl. 117 pl. 9 f. 5, pl. 11 f. 7 pl. 15 f. 10, P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943.—*I.* (*Inodrillina*) *dido* off Sand Key 35 fms., Florida, p. 119 pl. 10 f. 4, pl. 11 f. 8, pl. 15 f. 6; *I.* (*I.*) *hilda* Sambo Reef, Florida, in 135 fms., p. 120 pl. 9 f. 8; pl. 11 f. 10, pl. 13 f. 4, **spp. nov.**, P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943.

Inodrillia (*Inodrillia*) **gen.** et **subgen. nov.** Turridae type *Pleurotoma* (*Drillia*) *nucleata* Dall 1881 Bull. Mus. Comp. Zool. **9** p. 62, includes *Drillia cestrota* Dall; *I.* (*I.*) *hesperia* off Western Dry Rocks, Tortugas, Florida, p. 103 pl. 8 f. 4; pl. 10 f. 5; pl. 13 f. 3, P. Bartsch Mem. Soc. cubana Hist, Nat. **17** 2 1943 [vide etiam *Inodrillara*].

Inodrillina **subgen. nov.** of *Inodrillia* type *Inodrillia* (*Inodrillina*) *ino* **sp. nov.** off Sambo Reef in 120 fms., P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943.

Knefastia dalli **sp. nov.**=*Pleurotoma* funculata [sic] Reeve Couch Iconica pl. 11 f. 95, not *P. funiculata* Kiener 1839 Icon. Coq. Viv. p. 24 pl. 16 f1, P. Bartsch Proc. biol. Soc. Washington **57** 1944 p. 28.

†*Liratomina intertexta* Torquay, Upper beds, Victoria (Janjukian) Lower Miocene p. 26 pl. 7 f. 4; *L. adelaidensis* Abattoirs Bore, Adelaide, South Australia p. 27 pl. 7 f. 5, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Maoritomela equispiralis Torquay, Victoria, Lower Miocene pl. 2 f. 16; *M. balcombensis* Balcombe Bay, Victoria, Middle Miocene pl. 4 f. 12; *M. nutans* Abattoirs Bore, Adelaide, S. Australia, Lower Mid. Pliocene, pl. 2 f. 15; **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 39.

†*Manidrillia torquayensis* Torquay, Victoria (Janjukian) Lower Miocene p. 35 pl. 4 f. 7; *M. partinoda* Balcombe Bay, Mornington, Victoria, Middle Miocene p. 35 pl. 4 f. 5; *M. trispiralis* Gellibrand R. Victoria (Janjukian) Lower Miocene p. 36 pl. 4 f. 9; *M. serrulata* Balcombe Bay, Victoria, Middle Miocene p. 36 pl. 4 f. 8; *M. aldingensis* Aldinga S. Australia, Lower Miocene p. 36 pl. 4 f. 6; *M. seata* Aldinga Lower Miocene p. 37 pl. 4 f. 10; *M. intumescens* Gippsland Lakes, Victoria, Lower Pliocene, **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Megasurcula etheringtoni* **sp. nov.** Astoria formation, Tertiary Grays Harbor Co. Washington, C. Weaver Publ. Geol. University Washington **5** 2 1942 [Dec. 1943] p. 530 pl. 98 f. 13, pl. 101 f. 10.

†*Micantapex perarmatus* Clifton Beach 2 m. W. Princetown, Victoria (Balcombian) Mid Miocene p. 14 pl. 7 f. 1; *M. parri* Altona Shaft Victoria (Balcombian) Middle Miocene p. 15 pl. 7 f. 2: **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. & Mus. **3** 1 1944.

†*Mitrithara fenestrata* **sp. nov.** Balcombe Bay, Victoria, Middle Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 44 pl. 1 f. 14.

Neodrillia **gen. nov.** Turridae p. 83, type *N. cydia* p. 84 pl. 7 f. 6, pl. 10 f. 3, pl. 14 f. 1, off Fowey Light, Florida, in 25 fms. genus includes *Drillia euphanes* Melvill; with *N. jamaicensis* Jamaica p. 86, pl. 7 f. 8, pl. 14 f. 3; *N. encia* beach at S. Thomas, W.I., p. 87 pl. 7 f. 2, pl. 14 f. 4; *N. antiguensis* Falmouth, Antigua p. 88 pl. 7 f. 1, pl. 14 f. 5; *N. barbadensis* shallow water, Barbados, p. 89 pl. 7 f. 7, pl. 15 f. 1, **spp. nov.**, P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943.

†*Optoturris* **gen. nov.** Turridae, type *Pleurotoma optata* Harris (Balcombian) Middle Miocene, Victoria; *O. editus* **sp. nov.** Grice's Creek, Victoria (Balcombian) Middle Miocene, pl. 7 f. 3, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 12.

†*Paraguraleus* **subgen. nov.** p. 49 of *Guraleus*, type *P. balcombensis* **sp. nov.** Balcombe Bay, Victoria, Middle Miocene p. 50 pl. 5 f. 13, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Pseudexomilus* **gen. nov.** p. 61 Turridae, type *P. caelatus* **sp. nov.** Adelaidian Lower Mid-Pliocene, Abattoirs Bore, Adelaide, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Pseudoinquisitor trincrois* **sp. nov.** Jemenys Point, Victoria (Kalimnan), Lower Pliocene p. 28 pl. 3 f. 3; *P. gippstandensis* p. 28 pl. 3 f. 5; *P. scabsiculus* p. 29 pl. 3 f. 2; *P. delicatulus* p. 29 pl. 3 f. 4; **spp. nov.** Gippsland Lakes, Victoria (Kalimnan), Lower Pliocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Rugobela exsculpta* **sp. nov.** Torquay, Upper beds, Victoria, Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 63 pl. 6 f. 5.

†*Scrinium haroldi* f. 10; *S. duplicatum* f. 8; *S. nanum* f. 9, **spp. nov.** Torquay, Victoria, Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 45 pl. 1.

†*Splendrillia formosa* pl. 2 f. 5 Muddy Creek, Victoria (Balcombian), Middle Miocene; *S. Adelaidae* pl. 2 f. 6, Abattoirs Bore, Adelaide, S. Australia, **spp. nov.**, A. W. B. Powell Rec. Aust. Mus. **3** 1 1944 p. 31.

†*Syngenochilus* **gen. nov.** Turridae, type *S. radiaplex* **sp. nov.** Torquay, upper beds, Victoria (Janjukian), Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

†*Syntomodrillia* (*Hauturna*) *exuta* **sp. nov.** Gippsland Lakes, Victoria, Lower Pliocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 34 pl. 2 f. 13; †*S. circinata* f. 12, Torquay, Victoria, Lower Miocene; *S. venusta* f. 7, Balcombe Bay, Mornington, Middle Miocene; *S. complexa* f. 8, Altona Bay, Victoria Middle Miocene; *S. compta* f. 9, Balcombe Bay, Middle Miocene; *S. obsoleta* f. 11, Balcombe Middle Miocene: **spp. nov.** p. 38 pl. 2.—*S. ludbrookae* **sp. nov.** p. 34 pl. 2 f. 10, Abattoirs Bore, Adelaide, Lower Mid Pliocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Taranis Jeff. [the author has doubts of this genus being in its rightful place in Turridae], P. Bartsch **45.**

†*Teleochilus denseliratus* = *Daphnella gracillima* Ten.-Woods (Pr. Linn. Soc. N.S.W. **3**, p. 226 pl. 20 f. 10 1879), not of Ten.-Woods. 1877, Muddy Creek, Middle Miocene, p. 64 pl. 3 f. 10; *T. duplicatus* Grice's Creek, Victoria p. 65 pl. 6 f. 2 Middle Miocene; *T. balcombensis* Balcombe Bay, Victoria p. 65 pl. 6 f. 1; *T. comptus* Torquay, Victoria, Lower Miocene p. 66 pl. 6 f. 3; **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Terebra flammea in Central Cuba, M. L. Jaume **202**; *T.* Deshayes' Review, J. R. le B. Tomlin **396.**

†*Tomopleura ludbrookae* **sp. nov.** Abattoirs Bore, Adelaide, S. Australia, Lower Mid Pliocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 38 pl. 2 f. 14.

?*Veprecula adelaidensis* **sp. nov.** Abattoirs Bore, Adelaide, Lower Mid Pliocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 p. 61 pl. 6 f. 11.

†*Veruturris* **subgen. nov.** p. 9 of *Xenureturris* type *V. quadricarinatus* **sp. nov.** (Balcombian), Middle Miocene, Victoria p. 11 pl. 1 f. 5; *X.* (*V.*) *cochleatus* Muddy Creek, Lower beds p. 10 pl. 7 f. 11; *X.* (*V.*) *tomopleurides* Abattors Bore, Adelaide, S. Australia, Lower Mid Pliocene p. 11 pl. 1 f. 3; *X.* (*V.*) *bisculptus* Abattoire Bore, Adelaide, S. Australia, Lower Mid Pliocene p. 11 pl. 1 f. 4: **spp. nov.**, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944.

Viridrillia **gen. nov.** Turridae p. 90 type; *V. williami* **sp. nov.** off Government Cut, Miami, Florida p. 92 pl. 8 f. 2, pl. 10 f. 2, p. 15 f. 3; *Viridrillia* **subgen. nov.** p. 91, type as above; *V.* (*V.*) *cervina* **sp. nov.** 17 m. E.S.E. from Hatteras in 49 fms.; *V.* (*V.*) *bahamensis* shores of Bimini Is., Bahamas p. 93 pl. 8 f. 3, pl. 10 f. 8 pl. 15 f. 4, P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943.

Viridrillina **subgen. nov.** type *Viridrillia* (*Viridrillina*) *henderson*i **sp. nov.** off Western Dry Rocks, Florida, P. Bartsch Mem. Soc. cubana Hist. nat. **17** 2 1943 p. 99 pl. 7 f. 3, pl. 10 f. 1, pl. 15 f. 5.

†*Zemacies inexpectata* **sp. nov.** Torquay, lower beds, Victoria (Janjukian), Lower Miocene, A. W. B. Powell Rec. Auckland Inst. Mus. **3** 1 1944 pl. 21 pl. 7 f. 8.

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†*Acteocina kirkwoodiana* **sp. nov.** Kirkwood formation, Miocene Brandywine Lighthouse well, Delaware Bay, New Jersey, 385 feet, H. G. RICHARDS & H. HARBISON Notulae Naturae Philad. **132** 1944 p. 9 f. 1, 5, 6.

Glyptamoda orta **sp. nov.** Inverell p. 122, *G. aliciae interna* **subsp. nov.** p. 123; *G. cosmeta* figd.; T. IREDALE Aust. Nat. Sydney **11** 5 1944.

Mutalena **gen. nov.** Bullinidae the specific name selected being *reperta* for a "series of shells" from Booligal, T. IREDALE Aust. Nat. Sydney **11** 5 1944 p. 121, also *M*[*utalena* ?] *modica* **sp. nov.** Mirrouli Creek p. 122, T. IREDALE Aust. Nat. Sydney **11** 5 1944.

†*Peruviella* **nom. nov.** for *Peruvia* Olsson 1934 non Mallock 1929 (Diptera), A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 6 (164).

Tasmadora sorellensis **sp. nov.** Lake Sorrell, Tasmania, B. C. COTTON Quart. Rev. Biol. Baltimore **19** 2 1944 p. 147, 148 pl. xvii f. 17, 18.

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†*Tentaculites tenuicinctus* Römer in the Devonian Afghanistan, E. MAILLIEUX **273**.

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Notaeolidia subgigas **sp. nov.** Norwegian Antarctic exped. 1927–28, N. H. ODHNER Norske Vidensk. Akad. Oslo 1944 pp. 13–14 pl. 1 f. 9–10 text-figs. 11, 12, 14–16.

Pellibranchus [type] *cinnabareus* **gen.** et **sp. nov.**, Phyllirhoidae, Island Bay, Wellington, New Zealand, P. M. RALPH Trans. Proc. Roy. Soc. N.Z. **74** 1 1944 pp. 24, 25, 26 pls. 8, 9.

Pseudotritonia gracilidens **sp. nov.** Port Lockroy, Palmer Archipelago, W. of Graham Land, 90 m. depth, N. H. ODHNER Norske Vidensk. Akad. Oslo 1944 (Sci. Results Norwegian Antarct. Exped. 1927–28—[No. 21] p. 5 pl. 1 f. 7, 8 text-figs. 1–10.

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†*Helisoma valens* p. 24 pl. v f. 24; *H. goodrichi* p. 25 pl. v f. 22; *H. parallelum* p. 26 pl. v f. 16; **spp. nov.** Laverne formation, Lower Pliocene. S.W. of Gate, Beaver County, Oklahoma, A. B. LEONARD & D. S. FRANZEN Univ. Kansas Sci. Bull **30** 1 1944 p. 15 pl. v.

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Dignamoconcha **gen. nov.** Microcystidae type *D. dulcissima* **sp. nov.** top of Mt. Lidgbird, Lord Howe Island, T. IREDALE Aust. Zool. **10** 3 1944 p. 324 pl. xx f. 6.

Howearion **gen. nov.** Helicarionidae type *Howearion belli* **sp. nov.** top of Mt. Gower, Lord Howe Island, T. IREDALE Aust. Zool. **10** 3 1944 p. 329 pl. xx f. 3.

Innesoconcha **gen. nov.** Nitoridae type *H. catletti* Brazier, T. IREDALE Aust. Zool. **10** 3 1944 p. 325.—*I. segna* Boat Harbour, *I. princeps* Mt. Gower f. 5; *I. aberrans* Black Face, Mt. Lidgbird f. 15; **spp. nov.** Lord Howe Island, T. IREDALE Aust. Zool. **10** 3 1944 p. 326 pl. xx.

Melloconcha **gen. nov.** Microcystidae type *M. delecta* **sp. nov.** North Bay f. 8; *M. prensa* North Ridge f. 9; *M. grata* on moss near the top of Mt. Gower f. 13; **spp. nov.** Lord Howe Island, T. IREDALE Aust. Zool. **10** 3 1944 p. 323 pl. xx.

Nitoridae "To this fam. is allotted the species named *catletti* and its allies," T. IREDALE **192.**

Parmellops **gen. nov.** Helicarionidae type *Parmella etheridgei* Hedley, T. IREDALE Aust. Zool. **10** 3 1944 p. 329.

Rosselidena bartletti **sp. nov.** "much flatter than either. . .[Trochomorpha] *nigrans* Smith, and *cornea* Hedley", Misima Louisiades, T. IREDALE Proc. Roy. Zool. Soc. N.S.W. 1943-1944 p. 30.

Tribocystis **gen. nov.** Microcystidae type *T. rosacea* **sp. nov.** Lowlands near the Pines, p. 323 pl. xx f. 7; *T. flavescens* Lowlands, North Ridge p. 324 pl. xx f. 10; *T. alma* North Ridge p. 324; **spp. nov.** Lord Howe Island, T. IREDALE Aust. Zool. **10** 3 1944.

BULIMULACEA.

Anoma flexuosa (Pfeiffer) synonymy, W. J. CLENCH **88.**

Bostryx weyrauchi **sp. nov.** Ninabamba, near Ayacucho, Peru, H. A. PILSBRY Nautilus **57** 3 1944 p. 87 pl. 9 f. 3; *B. megomphalus*, Acobamba, near Tarma 3,200–3,400 meters p. 122 pl. 11 f. 15, 16; *B. abancayensis*, Abancay, near Curzo p. 123 pl. 11 f. 20; *B.* (*Peronaeus*) *anomphalus*, Santa Eulalia Valley p. 123 pl. 11 f. 7; *B.* (*Phenacotaxus*) *endoplax* p. 124 pl. 11 f. 9, 9a;

spp. nov. Peru, H. A. PILSBRY Nautilus **57** 4 1944; *B. huarazensis* **sp. nov.** Huarez, Santa Valley, Peru 3,100 meters H. A. PILSBRY Nautilus **57** 4 1944 p. 121 pl. 11 f. 17.

Bulimulus—The "Apertural Ridge," G. K. MACMILLAN **264.**

Drymaeus angulobasis **sp. nov.** Oreja de Capelo 1,600 meters p. 125 pl. 11 f. 10; *D. interpictus* (Martens) form *diversipictus* new form Oreja de Capelo 1,600 meters, p. 125 pl. 11 f. 11; *D. punctatus* Da Costa p. 126 pl 11 f. 12; *D. torallyi peruvianus* **subsp. nov.** Huarez, Santa Valley 3,100 metres, p. 126 pl. 11 f. 13; *D. flexuosus megas,* **subsp. nov.** Suesa, Upper Magdalena Valley p. 127 pl. 11 f. 3; Peru, H. A. PILSBRY Nautilus **57** 4 1944.—*D. eusteirus* **sp. nov.** Oxapampa, Peru, 1,800 meters, H. A. PILSBRY Nautilus **58** 1 1944 p. 29 pl. 1 f. 7.

Liguus blainianus guillermi **subsp. nov.** Horno de Cal de Guara province Habana, R. P. GUITART Rev. Soc. Malac. C. de la Torre Habana **1** 2 p. 83 text-fig. p. 84.—*L. fasciatus achatinus* Clench, R. G. CASTANEDA **78.**

Megalobulimus (*Microborus*) *incarum* **sp. nov.** Huaraz, Peru, 3,000–3,200 meters, H. A. PILSBRY Nautilus **58** 1 1944 p. 29 pl. 1 f. 8, 9.

Neopetraeus weyrauchi **sp. nov.** Huarez, Santa Valley, Peru, 3,200 meters, H. A. PILSBRY Nautilus **57** 3 1944 p. 88 pl. 9 f. 4.

Radiodiscus andium **sp. nov.** Tarma, Peru, 3,400 metres elevation, H. A. PILSBRY Nautilus **58** 1 1944 p. 30 pl. 1 figs. 11, a.

Sparnotion **subgen. nov.** of *Plekocheilus* for *Bulimus hauxwelli* Crosse from near Pebas, Eastern Peru, H. A. PILSBRY Nautilus **38** 1 1944 p. 30.

Thaumastus (*Scholvienia*) *weyrauch* **sp. nov.** Carpapata, on the Rio Tarma, near Palea, Peru, 2,300 meters, H. A. PILSBRY Nautilus **57** 4 1944 p. 121 pl. 11 f. 2, 2a.—*T. robertsi satipoensis* **subsp. nov.** Satipo, near Huancayo, Peru, 600 meters, H. A. PILSBRY Nautilus **57** 4 1944 p. 121 pl. 11 f. 1.

Torrecoptis **gen. nov.** Urocoptidae type *Torrecoptis bacillaris* [Torre]—*Urocoptis* (*Gongylostoma*) *bacillaris* Torre, P. BARTSCH Proc. biol. Soc. Washington **56** 1943 p. 31.

Urocoptis dubia Chitty, G. C. SPENCE **373.**

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†*Candidula radigueli* (Bgt.) *crayfordensis* K. & W. figs., A. S. KENNARD **221.**

Cepaea nemoralis in the Dartry Mountains Co. Sligo, A. COMFORT **97.**

Cepolis (*Cysticopsis*) *naevula* Mor., C. A. AGUAYO **22.**

Cochlostyla papuensis Hedley, a Philippine Island shell, T. IREDALE **193.**

Epiphragmophora atahualpa **sp. nov.** Andahuaylas, Peru, 3,100 metres, H. A. PILSBRY Nautilus **57** 4 1944 p. 119 pl. 11 f. 4, 4a, 5.

Haplotrema concavum (Say) mating, figs., G. R. WEBB **410.**

Helicella (*Candidula*) *unifasciata, gigaxi* fig., *intersecta* fig., *H.* (*Cernuella*) *virgata, H.* (*Xeromagna*) *cespitum, H* (*Helicella*) *ericetorum, H. geyeri* fig. W. ADAM **4.**

Helix unwini Braz, a nom. nud. Hedley des. under *Patula*, T. IREDALE, *H.* temperature experiments, E. BACHRACH **33**; *H. aspersa, pomatia,* modes of progression, H. W. LISSMAN **251**; *H. minuta* True, H. A. PILSBRY **313**; *H. pomatia* temperature experiments, A. REINBERG **340**; *H. pomatia* activity relative to moisture, G. P. WELLS **412.**

Helminthoglypta tudiculata (Binney), life history, W. M. INGRAM & H. M. ADOLPH **188**; *H. californiensis* (Lea), *H. dupetithouarsi* (Deshayes), *H. umbilicata* (Pilsbry)—mating habits, plate, G. R. WEBB **411.**

Otala lactea (Müller) in Texas, W. J. CLENCH **89**; *O. vermiculata* Müll., and *lactea* Müll. at Bryan, Brazos Co. Texas, R. W. JACKSON **196.**

Polymita, L. S. DE FUENTES **141.**

Psadara [=*Solaropsis*] *pizarro* **sp. nov.** Yanango near Huacapistana, Peru, 1,800 meters, H. A. PILSBRY Nautilus **57** 4 1944 p. 119 pl. 11 f. 6, 6a.

Theba cantiana new to Staffordshire, W. HILL **172.**

†*Thersitea gregaria* p. 83 f. 2, 3; *T. eremita* p. 85 f. 1, **spp. nov.** Eocene Marocco, M. ANTOINE Bull. Soc. Sci. nat. Maroc. **22** 1942.

†*Toxosoma eboreum* Conrad figured text-figs. 3, a, b, H. A. PILSBRY **316**.

Zachrysia petitiana virescens **subsp. nov.** Hayo del Infierno, S.E. of Cienfuegos, C. DE LA TORRE & A. MORENO Mem. Soc. Cubana Hist. nat. **17** 1 1943 p. 59 pls. 5, 6.

STREPTAXACEA.

Haplotrema paucispira variation size, C. G. AGUAYO **25**.

Pelecypoda or Lamellibranchia.

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NUCULACEA.

†*Austrosarepta obsoleta* p. 297 pl. 45 f. 29; *A. inusitata* p. 297 pl. 43 f. 2; **spp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944.

Lamellenucula **subgen. nov.** of *Nucula*, type *Nucula tamatavica* Odhner 1943, **nom. nov.** for *N. rugosa* Odhner 1919 (recent) Madagascar, H. G. SCHENCK J. Paleont. Menasha, Wis. **18** 1 1944 pp. 97–99 figs.

†*Nucula patagonidica* **sp. nov.** Lias, A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 143, *151* pl. 1 f. 1–4; †*N. major* **sp. nov.** dredged from Cape May Canal, Cape May County, New Jersey, Pleistocene (probably Wisconsin age), H. G. RICHARDS Notulae Naturae Philad. **134** 1944 p. 8 f. 5, 6.

†*Solemya* (*Acharax*) *willapaensis* **sp. nov.** Lower Oligocene 4,000 ft. N. 45° W. from Holcomb in the bend of Willapa River, C. WEAVER Publ. geol. Univ. Washington **5** 1 1942 [1943] p. 21 pl. 6 f. 2, 17.

†*Yoldia calumetensis* **sp. nov.** Coleraine formation, S.E. corner of Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9, *10* pl. 10 f. 2, 5, 8, 9.—†*Y. clallamensis* **sp. nov.** Blakeley formation, Upper Oligocene, N. side of Olympic Mountains, Washington, C. WEAVER Publ. geol. Univ. Washington **5** 1 1942 [1943] p. 48 pl. 9 f. 13.

FILIBRANCHIATA.

ARCACEA.

Arca (*Arca*) *fernandezensis* **nom. nov.** for *A. angulata* King & Brod. 1832 not Meuschen 1787, pp. 149, 154; *A.* (*Anadara*) *mazatlanica* **sp. nov.** 19 m. W. of Mazatlan, Mexico, lat. 23° 6′ N., long. 106° 47′ W., pp. 149, 156 pl. 1 f. 1, 4, L. G. HERTLEIN & A. M. STRONG Zoologica N.Y. **28** 1943.

†*Breviarca peruviana* **sp. nov.** La Mesa, Peru, Upper Senonian, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 35 (193) pl. 3 (10) f. 2, 8, 9.

Cucullaea type designated by Schmidt Versuch p. 65, *C. auriculifera* as *Arca cucullus* Gmelin No. 23, R. WINCKWORTH **419**; †*C. costulata* **sp. nov.**, A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 143, 152 pl. 1 f. 5, 6; †*C. truncata* Gabb figs., J. A. TAFF, G. D. HANNA & C. M. CROSS **386**; †*C. jaworskii* p. 209, pl. i f. 1–3; *C. rothi* p. 212 pl. ii f. 1–6; **spp. nov.** Lias Piedra Pintada, Argentina, A. F. LEANZA Notas Mus. La Plata **5** 1940.

†*Cyrtodonta reposita* **sp. nov.** Balclatchie Beds, Balclatchie, Girvan (Ordovician), F. R. C. REED Ann. Mag. Nat. Hist. (11) **11** 76 1944 p. 210 pl. ii f. 5.

Glycimeris keenae **sp. nov.** Forrester Island, Alaska, C. WILLETT Bull. S. Calif. Acad. Sci. **42** 3 1943 p. 114 pl. 12 f. 4–7; *G. septemtrionalis* Mddff. [=*Glycymeris* Da Costa 1778 non *Glycimeris* Lam. 1799]; *G. barbarensis* Conrad, *G. migueliana*, *G. subobsoleta* Cpr., G. *corteziana* Dall., figs., C. WILLETT **416**.

†*Idonearca capax* (Conrad) figs., L. W. STEPHENSON & W. H. MONROE **379**.

†*Incanopsis* **gen. nov.** Arcidae type *I. acariformis* **sp. nov.** Lower zone, Tortuga, Peru, Paita District, Upper Senonian, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. *34* (*192*), *35* (*193*) pl. 3 (10) f. 1, 2, pl. 5 (12) f. 8.

†*Peruarca* **gen. nov.** Arcidae type *P. pectunculoides* **sp. nov.** Paita District, Peru, Upper Senonian, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 16 (174), *32* (*190*) pl. 3 (10) f. 6, 7.

†*Pseudocucullaea paitana* **sp. nov.** beds of La Mesa, Upper Senonian, Paita District, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (*174*), *31* (*189*) pl. 2 (9) f. 3–5.

†*Warburgia asteroidea* **sp. nov.** Starfish Beds, Drummuck Group, Ladyburn, Girvan (Ordovician), F. R. C. Reed Ann. Mag. Nat. Hist. (11) **11** 76 1944 p. 212 pl. ii f. 4, 4a.

†*Whitella aliena* **sp. nov.** Starfish Bed, Drummuck Group, Ladyburn, Girvan (Ordovician), F. R. C. Reed Ann. Mag. Nat. Hist. (11) **11** 76 1944 p. 209 pl. 11 f. 1, 1a, 1b.

MYTILACEA.

Brachidontes arcturusensis **sp. nov.** Coleraine formation (Cretaceous) Arcturus Mine, Marble, Minnesota, H. R. Bergquist J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9, 20 pl. 5 f. 1, 2, 7, 9; pl. 6 f. 6, 13.

†*Modiolus gigantoides* **sp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, *182* pl. xi f. 2.

Modolaria [sic] [*Modiolaria*] *skomma* **sp. nov.** 70 fms. off Lantana, Florida, R. A. McLean & J. Schwengel Nautilus **58** 1 1944 p. 16 pl. 1 f. 10.

†*Myalina spathi* **sp. nov.** Lower Eo-Triassic Dinwoody formation, S.-W. Montana, Southeastern Idago, N. D. Newell & B. Kummel Bull. Geol. Soc. Amer. Washington D.C. **53** 6 1944 p. 956 pl. 3 f. 11.

†*Myoconcha neuquena* **sp. nov.** Lias, Piedra Pintada, Argentina, A. F. Leanza Notas Mus. La Plata **5** 1940 pp. 123, *126* text-fig. and pls. i, ii; †*M. neuquena torulosa* **var. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, *181* pl. xii f. 1.

Mytilus galloprovincialis, Chenikaeva & Shamarina **80**; *M. californianus* age and rate of growth, W. R. Coe & D. L. Fox **95a**; *M. californianus* figs., pl. ii, T. Gislen **146**; *M. edulis* L. & the Crustacean *Pandalus montagui*, E. Leloup **246**; *M. edulis* growth and mortality, V. L. Loosanoff & J. B. Engle **253**; *M. trampasensis* Clark Hypotype fig., K. A. Richey **348**; *M. californianus* Golgi apparatus, L. G. Worley **423**.

Volsella cerva **sp. nov.** Tortuga, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 37 (195) pl. 17 (24) f. 8.

Pseudolamellibranchiata.

PTERIACEA.

†*Ambonychinia balclatchiensis* **sp. nov.** Balclatchie Beds, Balclatchie, Girvan (Ordovician), F. R. C. Reed Ann. Mag. Nat. Hist. (11) **11** 76 1944 p. 213 pl. ii f. 2.

Atrina texta **sp. nov.** Gorda Bank, Lower California, lat. 23° 01′ N., long. 109° 30′ W., Hertlein, Hanna & Strong Zoologica N.Y. 28 1943 pp. 149, *166*, pl. 1 f. 9, 10.

†*Claraia clarai occidentalis* **var. nov.** Lower Eo-Triassic, W. Wyoming, Martin Creek, N. D. Newell & B. Kummel Bull. Geol. Soc. Amer. Washington D.C. **53** 6 1942 p. 955 pl. 3 f. 1, 2; †*C. mulleri* **sp. nov.** Lower Eo-Triassic, Gros Ventre Canyon, Western Wyoming, N. D. Newell & B. Kummel Bull. Geol. Soc. Amer. Washington D.C. **53** 6 1942 p. 956 pl. 3 f. 3, 4.

†*Conocardium mundulum* Murrumbidgee Series, Lower Middle Devonian, Lake Bathurst, Rly. Sta. 20 m. S. of Goulburn, N.S.W., p. 235 pl. xiii f. 7–9; *C. abscissum* Murrumbidgee Series, lower part Middle Devonian, Lake Bathurst Rly. Sta., p. 237 pl. xiii f. 10; *C. laseroni*, nr. Lake Bathurst Rly. Sta., p. 237 pl. xiii f. 11–13; *C. gogoense* Gogo Station, Kimberley Division, Western Australia p. 238 pl. xiii f. 14–16; *C. gympiense* Gympie Queensland Gympie Beds, Lower Permian=*C. australe* Etheridge 1892 (non McCoy) p. 239; *C. robustum* Upper Marine Series, Permian, Rylstone, nr. Ulladulla, Hurtley, N.S. Wales p. 241 pl. xiv f. 2–7, 10; *C. truncatum* Macleay Series (Lower Marine Series), Permian, Kimbriki, Manning R., northern N.S. Wales, p. 241 pl. xiv f. 11; **spp. nov.**, H. O. Fletcher Rec. Aust. Mus. Sydney **21** 4 1944.

†*Diploschiza cretacea* Conrad figs. L. W. Stephenson & W. H. Monroe **379**.

†*Gervillia pallas* p. 155 pl. iv f. 1; *G.* ? *turgida* p. 156 pl. iii f. 1–3, **spp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 p. 143; †*G. incertans* **sp. nov.** Tortuga, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 38 (196) pl. 6 (13) f. 4.

†*Inoceramus frugilis mesabiensis* **var. nov.** Conglomerate Coleraine formation (Cretaceous) Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9, *12* pl. v f. 3–6, 8; †*I. apollo* **sp. nov.**, A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 143, *157* pl. ii f. 1.

†*Perna jupiter* **sp. nov.**, A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 143, 154 pl. ii f. 2–4.

Pinctada margaritifera and Polydora infection, V. L. LOOSANOFF & J. B. ENGLE **254**.

PECTINACEA.

Comptopallium spiceri **sp. nov.** Christmas Island, H. A. REHDER Nautilus **58** 2 1944 p. 52 pl. 2 f. 1, 2.

†*Ctenostreon paucicostatum* **sp. nov.** A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, *179* pl. xi f. 3; pl. xiii f. 1, 2.

Dimya coralliotis **sp. nov.** California from interstices of a large branching coral brought up from deep water . . . identified as *Dendrophyllia oldroydi* Faustino, S. S. BERRY Proc. Malac. Soc. London **26** 1 1944 p. 25 text-figs 1–4; †*D. kaiparaensis* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 300 pl. 45 f. 26.

†*Lima* (*Plagiostoma*) *impudica*, **nom. nov.** for *Lima seminuda* Whidborne 1883, L. R. COX Pr. Malac. Soc. London **26** 2-3 1944 p. 62.

†*Limatula waialea* **sp. nov** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 298 pl. 44 f. 18.

Pallium note on the genus, H. A. REHDER **336**.

†*Pecten* (*Chlamys*) *delawarensis* **sp. nov.** Eocene (Jacksonian) Brandywine Lighthouse well, Delaware Bay, New Jersey, 825 ft., H. G. RICHARDS & H. HARBISON Notulae Naturae Philad. **132** 1944 p. 12 f. 2, 3, 4.

†*Pectinula* **gen. nov.** Pectinidae type *Pectinula cancellata* **sp. nov.** Lias, La Plata, A. F. LEANZA Notas Mus. La Plata **8** 1943 pp. 241, 244 pl. 1 f. 1-6.

Plicatula examples *P. gibbosa* and *P. depressa* this last is **nom. nud.** so the former is type and is so designated by Schmidt on p. 61 (Versuch) as *Spondylus plicatus*, R. WINCKWORTH **419**.

†*Pseudolimea* a review of the genus, with *P. harbaryensis*=*P. pradoanus* Beesley 1873 p. 17 (non de Verneuil) Hettangian Southern Warwickshire p. 80 pl. 2 f.7; *P. grettonensis* Upper Lias Gretton, Glos. pl. 82 pl. 3 f. 17; **spp. nov.**, L. R. COX Pr. Malac. Soc. London **26** 2-3 1944.

†*Pseudomonotis* genotype *Gryphites speluncarius* Schlotheim (t.s.d.), D. NICOL **297**.

ANOMIACEA.

†*Anomia tellinoides* Morton fig. L. W. STEPHENSON & W. H. MONROE, **379**.

OSTREACEA.

Exogyra cancellata, *costata* figs., L. W. STEPHENSON & W. H. MONROE **379**; †*E. boveyensis* p. 16 pl. 4 f. 1–13; *E. lamellosa* p. 17 pl. 2 f. 1–8; pl. 3 f.1–5, 10, 11, 20; *E. mesabiensis* p. 17 pl. 3 f. 6–9, 12–19, **spp. nov.** Coleraine formation (Cretaceous) Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **18** 1 1944 p. 9.

Gryphaea on page 71 (Versuch) no type is given; on p. 177 type is given as *Anomia gryphaea* without ref. so no type is designated, ? is this a slip for *A. gryphoides* Gmel., R. WINCKWORTH **419**; *G. arcuata*, W. NABHOLZ **290**; †*G. convexa* (Say) fig., L. W. STEPHENSON & W. H. MONROE **379**.

Ostrea inspection and preserving for food, A. H. BRYAN **70**; *O. virginica* accumulation of Manganese, P. GALTSOFF **142**; *O. virginica*, *gigas*, and *Polydora* infection, V. L. LOOSANOFF & J. B. ENGLE **254**; *O.* South Carolina, G. R. LUNZ, Jr., **257**; *O. virginica*, J. C. MEDCOF **280**; *O.* action of Diantlin, T. C. NELSON **293**; *O.* (*Gryphaea*) *virginica* stimulation by sperm of *O. cristata*, T. C. NELSON **294**.

†*Ostrea gilei* p. 14 pl. 6 f. 1–6, 10–13; pl. 7 f. 3–5; *O.* (*Alectryonia*) *staufferi* p. 15 pl. 9 f. 1–10; **spp. nov.** Coleraine formation (Cretaceous), Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **18** 1 1944 p. 9; †*O. palpa* Tortuga p. *40* (*198*) pl. 1 (8) f. 5, 6; pl. 4 (11) f. 8, 10; *O.* (*Lopha*)

sechura p. *41* (*199*) pl. 1 (10) f. 7, 8; **spp. nov.** Peru, Paita District, Upper Senonian, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 16 (174); †*O.* in the Trans-Alai Range, O. S. Vialov **403.**

Saxostrea commercialis Glycolysis content, G. F. Humphrey **178.**

Eulamellibranchiata.

UNIONACEA.

†*Anodontites laciranus* **sp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Columbiana Cienc. Bogota **4** 15–16 1941 p. 416.

Bartlettia stefanensis (Moricand) 1856 J. de C. f. 5, p. 178 pl. 7 f. 10 refigured, A. Carcelles **74.**

†*Carbonicola pseudorobusta* hinge structure, R. M. MacLennan **263.**

†*Diplodon* (*Rhipidodonta*) *oponcitonis* **sp. nov.** Tertiary Valla da Magdalena Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15, 16 1941 p. 415.

Fossula venezuelensis **sp. nov.** Rio Guarico at Barbacoas, State of Guarico, Venezuela (Olsson March 1944), H. A. Pilsbry & A. A. Olsson Nautilus **57** 3 1944 p. 89 pl. 10.

Lamellidens marginalis crystalline style, P. V. Gupta **158.**

†*Monocondilaea* (?) *marshalliana* **sp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15, 16 1941 p. 416.

†*Triplodon latouri* **sp. nov.** Tertiary Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15, 16 1941 p. 415.

Unionidae, Joseph Wilcock's Illustrations of British species, N. F. McMillan (in Bayford & McMillan), **52**; U. of Anglaize County, Ohio, C. F. Clark **82.**

TRIGONIACEA.

†*Clavitrigonia* **subgen. nov.** *Trigonia* type *Trigonia clavellata* Sow., A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, 162.

†*Frenguelliella* **subgen. nov.** *Trigonia* type *Trigonia inexpectata* Jaworski 1915 Jura in Sudamerika II p. 377 pl. v f. 2 a-b, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, 164.

†*Jaworskiella* **subgen. nov.** *Trigonia* type *Trigonia burckhardti* Jaworski, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, *166* pl. vi f. 2, 3.

Trigonia angulicostata Gabb. fig., L. W. Stephenson & W. H. Monroe **379.**

†*Trigonia nurandaensis* 357, *371* pl. i f. 9 Kimmeridgian; *T. pichimoncolensis* 351, 372 pl. iv f. 4; *T. haupti* 358, 381 pl. v f. 7, 8 Newcomian; *T. fortinensis* 358, 386 pl. iv f. 5–8 Newcomian; *T. opistoloprophora* 358, *388* pl. iii f. 5–6 Newcomian, **spp. nov.**, L. R. Lambert Rev. Mus. La Plata N.S. Paleont **2** 1944; †*T. tapiai* 357, 358 pl. i f. 2–4 Lias; *T. coouncoensis* 357, 360 pl. i f. 1 Dogges, *T. leanzai* 357, *362* pl. i f. 5–6 Calovian; *T. mollesensis* 357, *364* pl. iii f. 1–4, pl. x f. 6 Calovian; *T. corderoi* 357, *366* pl. iv f. 1–3 Calovian; *T. cracaicoensis* 307, 367 pl. ii f. 1–5 Calovian; *T. radixscripta* 357, 369 pl. i f. 7–8 pl. v f. 5 Calovian, **spp. nov.**, Neuquian Patagonia, A. F. Leanza Notas Mus. La Plata **6** 1 1941; †*T.* (*Steinmanella*) *spendeda* 225 pl. i f. 1 2; *T.* (*Megatrigonia*) *carrincurensis* 229 pl. ii f. 1–2 **spp. nov.**, A. F. Leanza Notas Mus. La Plata **6** 1 1941. [These occur as nom. nud. in A. F. Leanza **233**]; †*T.* (*Clavitrigonia*) *arancana* **sp. nov.** pl. vi f. 4–6, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 144, 162; †*T.* (*Scabrotrigonia*) *gerthi* p. 42 (200) pl. 3 (10) f. 4, 5, 10; *T. hopkinsi* p. 43 (201) pl. 3 (10) f. 1; **spp. nov.** Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 16 (164).

ASTARTACEA.

†*Cuna kaipara* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 299 pl. 43 f. 4.

†*Lirodiscus santeensis* **sp. nov.** (Eocene) Santee-Cooper Canal 17 m. N.-W. of Moncks Corner, South Carolina, A. Harbison Notulae Naturae Philad. **143** 1944 p. 4 pl. 2 f. 3

CARDITACEA.

†*Cardita marwicki* **nom. nov.** for *Cardita kaiparaensis* Laws (T.R.S. N.Z. vol. 68 p. 473), C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 312.

†*Pleuromeris otamateaensis* p. 299 pl. 43 f. 5, **sp. non.**; *P. instata* p. 299 pl. 43 f. 1–3; Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944.

Venericardia Type *V. imbricata* designated on p. 57 Schmidt Versuch as *Venus imbricata* [Gmelin] No. 34 [Chemnitz] vi figs. 299–300. This will replace the usual typification of *V. planicosta* but the two species are congeneric, R. Winckworth **419**; †*V. rohri* **sp. nov.** Marae quarry, Trinidad (Paleocene), R. Rutsch Ecl. geol. helv. **36** 3 1943 p. 156 pl. iii f. 2.

SPHAERIACEA.

†*Corbicula meridionalis* **sp. nov.** Tortuga, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 47 (205) pl. 4 (11) f. 3–4.

Eupera of the Coosa River, C. Goodrich **151**.

Musculium of the Coosa River, C. Goodrich **151**.

Pisidium of the Coosa River, C. Goodrich **151**; *P.* list of spp. and subspp. recorded as from Indiana p. 323, C. Goodrich & H. v. d. Schalie **152**.

†*Pisidium exiguum* p. 108 f. 4, T. C. Yen **425**.

†*Sogamosa* **gen. nov.** Corbiculidae type, *S. cyrenoides* **sp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15–16 1941 p. 416.

Sphaeriidae, a preliminary survey, S. T. Brooks & H. B. Herrington **66**.

Sphaerium striatinum, a catalogue of its forms, S. T. Brooks & H. B. Herrington **66**; *S.* of the Coosa River, C. Goodrich **150**; *S.* list of spp. reported from Indiana p. 321, C. Goodrich & H. v. d. Schalie **152**; *S. occidentale* seasonal maturing? H. B. Hetherington **171**.

CYPRINACEA.

†*Cypricardia ancatruzzi* **sp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 145, *188* pl. xv f. 3; pl. xvii f. 1–3.

†*Tortucardia* **subgen. nov.** of *Glossocardia* type *Glossocardia* (*T.*) *stephensoni* **sp. nov.** Tortuga, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 46 (204) pl. 17 (24) f. 5–7.

GAIMARDIACEA.

Julia equatorialis **sp. nov.** Caleto Sal, north of Mancora, Dep. of Tumbex, Peru (2 exx.), H. A. Pilsbry Nautilus **57** 3 1944 p. 86 pl. 9 f. 10–11.

DREISSENACEA.

†*Mytilopsis singewaldi* **sp. nov.** Tertiary, about 1 m. from the Quebrada Sungarilla, Pachitea River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 147 pl. 11 f. 35, 36; †*M. cira* **sp. nov.** Tertiary Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15, 16 1941 p. 416.

LUCINACEA.

†*Arthritica ambotruncata* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 301 pl. 43 f. 6, 7.

†*Diplodonta berryi* high and undercut bluff of York R. below Yorktown pl. 2 f. 3, 6; *D. conradi* fine sandy beds along York R. just above Yorktown, Miocene p. 2 f. 7, 8; C. B. McGarock Notulae Naturae Philad. **189** 1944.

†*Lucina payllalefi* 192 pl. xviii f. 2; *L. huayquimili* 193 pl. xviii f. 3, 5, **spp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 145 192, 193.

†*Pteromyrtea disparilis*, Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 301 pl. 43 f. 10 **sp. nov.**

†*Tenea inflata* (Gabb) figs., J. A. Taff, G. D. Hanna & C. M. Cross **386**.

ERYCINACEA.

†*Mysella apudalpha* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 301 pl. 43 f. 8.

†*Rochefortula brevitas* **sp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. LAWS Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 302 pl. 43 f. 9.

CHAMACEA.

†*Chama richardsi* **sp. nov.** (Eocene) Santee-Cooper canal 17 m. N.-W. of Moncks Corner, South Carolina, A. HARBISON Notulae Naturae Philad. **143** 1944 p. 5 pl. 2 f. 5, 6.

†*Sauvagesima peruviana* **sp. nov.** Upper Senonian, Paita District, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 48 (206) pl. 8 (15).

CARDIACEA.

Cardium vide etiam subgenn. *Perucardia* et *Incacardium*, A. A. OLSSON **300**; *C. edule*, food, C. WERNSTEAT **413.**

†*Cardium enstromi* **sp. nov.** Coleraine formation (Cretaceous), Hill Annex Mine, Calumet, Minnesota, H. R. BERGQUIST J. Paleont. Menasha, Wis. **8** 1 1944 pp. 9, 22 pl. 1 f. 6, 7, 12.—†*C. palmerae* **sp. nov.** (Eocene) Santee-Cooper Canal 17 m. N.-W. of Moncks Corner, South Carolina, A. HARBISON Notulae Naturae Philad. **143** 1944 p. 5 pl. 2 f. 7.—†*C. asaphum* **sp. nov.**, A. F. LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 145, *195* pl. xix f. 1, 2.—†*C.* ? *abnormalis* **sp. n.** Upper Senonian, Paita Peninsula, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 50 (208) pl. 17 (24) f. 3.

Cerastoderma pinnulatum Conrad, *elegantulum* Beck figs., W. L. CLENCH & L. C. SMITH **92.**

Clinocardium ciliatum Fabricius figs, W. J. CLENCH & L. C. SMITH **92.**

Dinocardium robustum vanhyningi **subsp. nov.** Sanibel Island, Florida, W. J. CLENCH & L. C. SMITH Johnsonia, Harvard **1** 13 1944 p. 11 pl. 7—*D. robustum* Sol. fig., W. J. CLENCH & L. C. SMITH **92.**

†*Ethmocardium woodsi* Selinqu Rapids, Piripanan, Upper Cretaceous, **sp. nov.**=Cardium sp. 2 Woods N.Z. Geol. Surv. Pal. Bull. p. 38 pl. 18 f. 4, 5, J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 p. 259 pl. 36 f. 21.

†*Hedecardium* **gen. nov.** Cardiidae type *Cardium waitakiense* Suter Oligocene N.Z. (Proc. Malac. Soc. vii p. 209, pl. 18 f. 6), J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 pp. 260, 261 pl. 35 f. 1, 2, 5.—†*H. olssoni* **sp. nov.** Shell Gully, Kelly's Farm, Chattoa (Duntroonian), J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 p. 262 pl. 35 f. 6; pl. 37 f. 25.

Hemicardium cordatum Hector (type lost) without which sp. is not identifiable (Loc. "Mahomo" should be Maheno, Oamaru), J. MARWICK **277.**

†*Incacardium* **subgen. nov.** of *Cardium* type *Cardium* (*I.*) *mellisum* **sp. nov.** Paita District, Upper Senonian, Peru, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 16 (174), *53* (211) pl. 5 (12) f. 2, 4, 6.

Laevicardium laevigatum L., *sybariticum* Dall, *mortoni* Conrad, *pictum* Ravenel, figs., W. J. CLENCH & L. C. SMITH **92.**

†*Maoricardium* **gen. nov.** Cardiidae type *Cardium spatiosum* Hutton, Pliocene (Catal. Tert. Moll. 1873, 23), J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 pp. 263, 264, pl. 37 f. 30.

Microcardium peramabile Dall, *tinctum* Dall, figs., W. J. CLENCH & L. C. SMITH **92.**

†*Nemocardium* (*Pratulum*) *modicum* **sp. nov.** Boulder Hill, near Dunedin Danian, J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 p. 265 pl. 36 f. 17, 18.—*N.* (*Pratulum*) *quinarium* **sp. nov.** roadside just E. of Mangatarchu Stream, Waikohu Surv. Dist. (Opoitian), J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 p. 266 pl. 36 f. 10, 16.

†*Ovicardium* **subgen. nov.** of *Trachycardium* Mörch, type *T.* (*O.*) *rossi* **sp. nov.** (Opoitian) Te Reinga Falls, Hangarua R. p. 268 pl. 35 f. 7, 8; *T.* (*O.*) *parki* **sp. nov.** (basal Castlecliffian) mouth of Butler's (Ototoka) Creek Niekirmaru Surv. Dist., p. 269 pl. 36 f. 19, 22, 23, J. MARWICK Trans. Proc. Roy. Soc. N.Z. **74** 3 1944.

Papyridea hiatus Meuschen *semisulcatum* Gray, figs., W. J. CLENCH & L. C. SMITH **92.**

†*Perucardia* **subgen. nov.** of *Cardium* type *Cardium* (*P.*) *brüggeni* **sp. nov.** Paita District Peninsula, Upper Senonian, A. A. OLSSON Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), *51* (*209*), *52* (*210*) pl. 5 (12) f. 1, 3, 5, 7.

†*Plethocardia propinqua* **sp. nov.** Balclatchie Beds, Balclatchie, Girvan (Ordovician), F. R. C. Reed Ann. Mag. Nat. Hist. (11) **11** 76 1944 p. 211 pl. ii f. 3, 3a-c.

Serripes groenlandicus Brug. figs., W. J. Clench & L. C. Smith **92.**

Trachycardium muricatum L. *isocardia* L. *egmontianum* Shuttwth., *T.* (*Acrosterigma*) *magnum* L., W. J. Clench & L. C. Smith **92.**

Trigoniocardia medium L., *antillarum* Orb. *ceramidum* Dall., figs., W. J. Clench & L. C. Smith **92.**

†*Varicardium* **gen. nov.** Cardiidae type *Protocardium serum* Hutton Catal. Tert. Moll. 1873, p. 23, gen. also includes *Cardium patulum* Hutton tom. cit. p. 23, J. Marwick Trans. Proc. Roy. Soc. N.Z. **74** 3 1944 pp. 266, 267 pl. 37 f. 26, 27.

VENERACEA.

†*Aphrodina pacifica* p. 54 (212) pl. 7 (14) f. 1, 2; *A. speciosa* p. 55 (213) pl. 4 (11) f. 5–7; *A.* (*Sechurina*) *australis* 57 (215) pl. 7 (14) f. 3, 5, 6, **spp. nov.**, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 16 (174).

†*Hartwellia hartwellensis* J. de C. Sow. genotype fig., L. R. Cox **107.**

†*Icanotia pacifica* **sp. nov.** Paita District, Peru, Upper Senonian, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 58 (26), pl. 2 (9) f. 8.

Liocyma schefferi Bartsch & Rehder, range extended 250 m. W., W. J. Eyerdam **132.**

†*Macrocallista* (*Costacallista*) *rathbionensis* (Maury) fig., R. Rutsch **356.**

†*Pachydesma crowderi* **sp. nov.** Cowlitz formation, Upper Eocene, Lower Cowlitz Valley, Southwestern Washington, C. Weaver Publ. Geol. Univ. Washington **5** 1 1942 [1943] p. 190 pl. 46 f. 8.

Petricola type *P. costata* designated on p. 55 Schmidt Versuch p. 55 as *Venus lapicida* [Chemnitz] x f. 1664, 1665, R. Winckworth **419.**

†*Petricola rogersi* **sp. nov.** blue clay lens about midway between the undercut Yorktown bluff below Yorktown and the Moore House, Miocene, Virginia, C. B. McGavock, jr. Notulae Naturae Philad. **139** 1944 p. 2 f. 9–12.

†*Pronoella elongata* Aulenian of Haselbury, Somerset, p. 110 text-fix 4B; *P. nortonensis* Bathonian of Hook Norton, Oxon. p. 111 text-fix 4C, **spp. nov.**, L. R. Cox Geol. Mag. London **81** 3 1944. —†*P. santonensis* **sp. nov.** holotype in the Scunthorpe Museum No. SM/C/26, L. R. Cox Geol. Mag. London **81** 3 1944 p. 107 text-fig. 4D.—†*P. trigonellaris* auctt. Aulenian, Gundershofen, Alsace, genotype fig.—†*P. beneckei* Rollier, figs., L. R. Cox **107.**

†*Sechurina* **subgen. nov.** of *Aphrodina* type *Aphrodina* (S.) *australis* **sp. nov.** Cretaceous, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 57 (215), pl. 7 f. 3, 5, 6.

†*Trigonocallista nitida varians* (Gabb) figs., J. A. Taff, G. D. Hanna & C. M. Cross **386.**

Venus mercenaria, R. W. Dexter **119.**—*V. mercenaria* action of Acetycholine, B. B. Wait **405.**

MACTRACEA.

†*Liopistha alternata* Weller, fig., L. W. Stephenson & W. H. Monroe **379.**

†*Mulinoides* **gen. nov.** Mactridae type *M. chilca* **sp. nov.** p. 16 (164), 16 (174), *59* (*217*), *61* (*219*) pl. 7 (14) f. 4, 7–9; *M. chicama* **sp. nov.**, p. 16 (174), 61 (219) pl. 6 (13) f. 7, Upper Senonian, Paita Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944.

†*Sargana stantoni* (Weller) figs., L. W. Stephenson & W. H. Monroe **379.**

Spissula solidissima Dillwyn variation—tables, M. K. Jacobson **197.**

TELLINACEA.

Macoma baltica, food, C. Wernsteat **413.**

†*Macrodonax* **gen. nov.** Donacidae type *M. peruviana* **sp. nov.** Paita, Peru, Upper Senonian, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 16 (174), *62* (220) pl. 1 (8) f. 3, 4.

Tellidora vide *Tellipiura*, **subgen. nov.** A. A. Olsson **300.**

†*Tellina calumetensis* **sp. nov.** "represented by three internal molds," in the conglomerate of the Coleraine formation (Cretaceous) Hill Annex Mine, Calumet, Minnesota, H. R. Bergquist J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9, *23* pl. 9 f. 13, 14.—†*T. garderae* **sp. nov.** Yorktown formation (Miocene) Virginia, C. B. McGavock, Jr. Notulae Naturae Philad. **139** 1944 p. 1 f. 1, 2.

†*Tellipiura* **subgen. nov.** of *Tellidora* type *Tellidora peruana* **sp. nov.** Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 16 (174), *63* (221) pl. 6 (13) f. 13–16.

SOLENACEA.

Ensis directus, Conrad, 9 in. in length, W. J. Clench **87**.

†*Legumen peruvianum* **sp. nov.** Tortuga, Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 16 (174), 58 (216) pl. 6 (13) f. 12.

Siliqua patula length-growth curves, G. A. Baker **36**.—*S. patula* growth relative to latitude, Weymouth, McMillan & Rich **414**.

MYACEA.

Caestocorbula Vincent on the validity of, H. E. Vokes **404**.

†*Corbula tuma* pl. 6 (13) f. 8–11; *C. broggii* pl. 6 (13) f. 1–3, Upper Senonian, Paita, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175) *62* (*224*).—†*C. arcana* **sp. nov.** Tertiary 1 m. from Quebrada Sungarillo Pachitea River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 149 pl. 11 f. 38.—†*C.* (*Corbula*) *Abundans C.* (*Erodona* ?) *magdalensis* **spp. nov.** Tertiary, Valla da Magdalena, Colombia, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15–16 1941 p. 417.

†*Ostomya terminalis* f. 33; *O. pachiteana* f. 39, 41, **spp. nov.** Tertiary 2 m. downstream from Isla de Santa Isabel (Red beds), Pachitea River, Peru, H. A. Pilsbry Proc. Acad. Nat. Sci. Philad. **96** 1944 p. 149 pl. 11.

†*Ostomya colombiana* **sp. nov.** Valla da Magdalena, Colombia, Tertiary, H. A. Pilsbry & A. O. Olsson Rev. Acad. Colombiana Cienc. Bogota **4** 15–16 1941 p. 417.

†*Panope frailia* **sp. nov.** Paita District, Peru, Upper Senonian, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 17 (175), *64* (222) pl. 4 (11) f. 9.

†*Parmicorbula* **gen. nov.** Aloididae type *Corbula neaeroides* Blankenhorn Aptian Cretaceous Abuk Lebanon Mts., H. E. Vokes Amer. J. Sci. New Haven **242** 11 1944 p. 621 pl. 1 f. 7–18.

ADESMACEA.

Bankia gouldi (Bartsch) Daytona Beach, Fla., B. R. Richards & W. F. Clapp **343**.

†*Bankia cupedia* p. 303 pl. 43 f. 12; *B. aemula* p. 303 pl. 43 f. 11; **spp. nov.** Pakaurangi Point, Kaipara, New Zealand, C. R. Laws Trans. Proc. Roy. Soc. N.Z. **73** 4 1944.

Teredo in Brussels Museum, F. Moll **284**.

PANDORACEA.

†*Allorisma strongi* **nom. nov.**=*A. elongata* Strong 1872 not *Pholadomya elongata* Morton 1836=*A. elongata* (Morton), nor *A. elongata* Worthen 1884) =*A. worthenanum* Miller=*A. elongata* Lane 1900, G. M. Ehlers & W. E. Humphrey Conts. Mus. Pal. Univ. Michigan Ann Arbor **6** 6 1944 p. 121 pl. 1 f. 1–7.

†*Anatimya plicata* **sp. nov.** Coleraine formation N.-E. corner of Arcturus Mine, Marble, Minnesota, H. R. Bergquist J. Paleont. Menasha, Wis. **18** 1 1944 pp. 9, *21* pl. 1 f. 1, 2, 5.

†*Anatina marblensis* **sp. nov.** Coleraine formation (Cretaceous) N.-E. corner of Arcturus Mine, Marble, Minnesota, H. R. Bergquist J. Paleont. Menasha, Wis. **8** 1 1944 pp. 9, *21* pl. 1 f. 3, 4.

†*Arcomya* ? *rotundocaudata* **sp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 145, *186* pl. xv f. 1.

†*Homomya neuquena* **sp. nov.**, A. F. Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942 pp. 145, *185* pl. xvi f. 2.

†*Periploma narmeta* **sp. nov.** Upper Senonian, Paita District, Peru, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 16 (174), 44 (202) pl. 3 (10) f. 3.

POROMYACEA.

Cetoconcha malespinae Dall., J. L. Baily, Jr. **34.**

†*Poromya teglandae* **sp. nov.** in Sandstone cliffs on north side of Restoration Point opposite Seattle, Kitsap Co. Washington, C. Weaver Publ. Geol. Univ. Washington **5** 1 1942 [1943] p. 121 pl. 25 f. 23.

Cephalopoda.

Tetrabranchiata.

NAUTILACEA.

Nautiloidea environment of early Paleozoic forms, R. H. Flower **138.**

Nautilus alumnus **sp. nov.**=*N. pompilius* of Australian writers Brazier, Hedley, etc. recording shells from Queensland, drifted specimens from N.S. Wales; *N. repertus* **sp. nov.**. Pelsart Island, Abrolhos W.A. (fig.)=*N. ambiguus* Sowerby Thes. Conch. vol ii p. 464 pl. xcvii f. 2 (No. loc.), T. Iredale Aust. Zool. Sydney **10** 3 1944 p. 295.

†*Paracenoceras costatum* **sp. nov.** Jurassic Dogou Harrar, Province of Ethiopia, G. Scott Bull. Amer. Mus. Nat. Hist. **82** 3 1943 p. 88 pl. 24 f. 1, 3.

Dibranchiata.

Decapoda.

SEPIACEA.

Sepia dollfusi **sp. nov.** Red Sea, W. Adam Bull. Mus. Hist. nat. Belg. **17** 62 1941 p. 1, *12* pl. ii f 3.—*S. prashadi* Winckworth, *S. rostrata* Orb., *S. winckworthi* Adam, W. Adam **9.**—*S. pharaonis* Ehrenberg 1831 fig., *S. jibba* Ehrenberg 1831, W. Adam **11.**—*S. elongata* Fér., W. Adam **12.**—*S. savignyi* W. Adam **13.**—*S. elegans* at Port Ballintrae, Co. Antrim, R. N. Irwin **194.**

LOLIGINACEA.

Doryteuthis arabica (Ehrenberg 1831), figs., W. Adam **11.**

Loligo brevis Blv., E. H. Behre **55.**

Sepioteuthis hemprichii Ehrenberg 1831, figs., W. Adam **11.**

Octopoda.

OCTOPODACEA.

Octopodacea of New Zealand, W. Benham **57.**

Octopus bocki **sp. nov.** Viti Leva Namuka, Fiji Ids., W. Adam Bull. Mus. Hist. nat. Belg. **17** 35 1942 p. 1.—*O. robsoni* **sp. nov.** G. of Suez, W. Adam Bull. Mus. Hist. nat. Belg. **17** 152 1941 p. 1.—*O.* diagnostic value of radula, W. Adam **7.**

Paroctopus zealandicus **sp. nov.** 40-54 fms. 8 m. N.-E. of Moeraki, New Zealand, W. B. Benham Trans. Proc. Roy. Soc. N.Z. **73** 4 1944 p. 256 pl. 40.

Tremoctopus violaceus Della Chiaie figd., W. B. Benham **57.**

AMMONITACEA.

†*Adrianites plummeri* **sp. nov.** Permian, Las Delician, Coahuila Mexican, A. K. Miller Spec. Pap. Geol. Soc. Amer. **52** 1944 pp. 72, *99* pl. 35 f. 1, 2 text-fig. 14B.

†*Agathicerus applanatum* **sp. nov.** Permian, 300 yards E. of mouth of southeastern gully of Wandagee Hill, N.-W. Div., Western Australia, C. Teichert J. Paleont. Menasha, Wis. **18** 1 1944 p. 85 pl. 17 f. 6, 7 text-fig. 1.

†*Ammonites chicoensis* Trask, fig., J. A. Taff, G. D. Hanna & C. M. Cross **386.**

Ammonoidea from the Bagh Beds, G. W. Chiplonker **81.**

†*Apsidoceras milesi* **sp. nov.** Upper Cambrian, U.S.A., C. H. Kindle Amer. J. Sci. New Haven **243** 3 1945 p. 160 pl. 1 f. 1–5.—†*A. evolutum* **sp. nov.** Dogou, Ethiopia, Jurassic, G. Scott Bull. Amer. Mus. Nat. Hist. **82** 3 1943 p. 78 pl. 17 f. 1, 4 text-figs. 13.

†*Aturia clerkei* **sp. nov.** track following the eastern scarp of the Kennedy Range (Tertiary) Western Australia, C. Teichert J. Paleont. Menasha, Wis. **18** 1 1944 pp. 77, *79* pl. 15 f. 1–4; pl. 16 f. 1, 2 text-fig. 2.

†*Austrosphenodiscus* **subgen. nov.** *Coahuilites* Engonoceratidae type *Sphenodiscus pleurisepta* Conrad var. *peruviana* Gerth, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 pp. 6 (164), 18 (176), *108* (266), pl. 17 f. 1, 2.

†*Bactrites mexicanus* **sp. nov.** Permian, Valle de Las Delicias, Coahuila, Mexico, A. K. Miller Spec. Pap. Geol. Soc. Amer. **52** 1944 pp. 72, *82* pl. 20 f. 8, 9; pl. 21 f. 4–6.

†*Bitaunioceras coahuilense* **sp. nov.** Permian, Valle de Las Delicias, Coahuila, Mexico, A. K. Miller Sec. Pap. Geol. Soc. Amer. **52** 1944 pp. 72, *76* pl. 20 f. 1–7.

†*Cibolites mojsisovicsi* **sp. nov.** Permian, Las Delicias, Coahuila, Mexico, A. K. Miller, Spec. Pap. Geol. Soc. Amer. **52** 1944 pp. 73 *124* pl. 42 f. 1–5 text-fig., 29 C.

†*Corongoceras filicostatum* **sp. nov.** Viñales limestone, Cuba, Late Jurassic, R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942 p. 1,448 pl. 5 f. 1–16.

†*Dickersonia* **gen. nov.** p. 1,449 Late Jurassic, Cuba (nr. *Blanfordiceras* Spath), type *D. sabanillensis* **sp. nov.** p. 1,450 pl. 6 f. 9–12, 14–20; *D. ramonensis* **sp. nov.** p. 1,451 pl. vi f. 1–8, both from the Viales limestone, Late Jurassic, Cuba, R. W. Imlay Bull. Geol. Soc. Amer., Washington D.C. **53** 10 1942.

†*Endoceras clerkei* p. 24 pl. i f. 1–3; pl. ii f. 1, 2; pl. iii f. 2; pl. iv. 3. 2; *E. gracillimum* p. 27 pl. iii f. 1; *E. decorahense* p. 27 pl. iv f. 1, **spp. nov.** Ordovician Minnesota, A. K. Miller & F. D. Kummel Amer. Carnegie Mus. Pittsburgh **30** 2 1944.

†*Gastrioceras adaense* p. 423 pl. 64 f. 4–6 text-fig. 3A; *G. fittsi* p. 424 pl. 68 f. 1, 2; *G. grileyi* p. 425 pl. 67 f. 4–8 text-figs. 4 **spp. nov.** Impure arenaceous limestone, top of Union Valley formation [Carboniferous] Buck Creek, N. of Midland Valley Rly. near Lovelady, 7 m. S.-E. of Ada, Poatotoc Co. Oklahoma; A. K. Miller & J. B. Owen J. Paleont. Menasha, Wis. **18** 5 1944.—†*G. adaense* **sp. nov.** Union Valley formation, Oklahoma, Miller & Owen J. Paleont. Menasha, Wis. **18** 5 1944 p. 423 pl. 64 f. 4–6 text-fig. 3A.—†*G. grileyi* **sp. nov.** Union Valley formation, Oklahoma, A. K. Miller & L. B. Owen J. Paleont. Menasha, Wis. **18** 5 1944 p. 425 pl. 67 f. 4–8 text-fig. 4.

†*Glabrophysodoceras* **gen. nov.** Aspidoceratidae, type *G. abyssinianum* p. 82 pl. 21 f. 1, 4 text-fig. 18, **sp. nov.** Jurassic, Dirre Dana, Ethiopia; *G. gananuense* **sp. nov.** Jurassic, Gananu, Ethiopia p. 83 pl. 19 f. 2, 3 text-fig. 19, G. Scott Bull. Amer. Mus. nat. Hist. **82** 3 1943.

†*Hamulina* ? *rosariensis* **sp. nov.** Viñales limestone, Late Jurassic, Cuba, R. W. Imlay Bull. Ecol. Soc. Amer. Washington D.C. **53** 10 1942 p. 1,457 pl. 9 f. 1–11; pl. 12 f. 1.

†*Hemiptychodus* cf. *H. mortoni* (Mantell) fig., L. W. Stephenson & W. H. Monroe **379.**

†*Idoceras bohanense* **sp. nov.** Mejasia 2 m. E. of Behan, British Somaliland, Jurassic, G. Scott Bull. Amer. Mus. nat. Hist. **82** 3 1943 p. 76 pl. 15 f. 2, 3, 5 text-fig. 11.

†*Kingoceras kingi* **gen. et sp. nov.** Paraceltitidae (Permian) Las Delicias, Coahuila, Mexico, A. K. Miller Spec. Pap. Geol. Soc. Amer. **52** 1944 pp. 73, *125* pl. 42 f. 6–9 text-fig. 29E.

†*Leptoceras* ? *nondense* **sp. nov.** Viñales limestone, Late Jurassic, Cuba R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942 p. 1,456 pl. 10 f. 5–9, 11, 12.—*L.* ? *catalinense* **sp. nov.** p. 1,457 pl. 10 f. 1–4 Late Jurassic, Cuba, R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942.

Leucochilus and *Leucochila* absolute homonyms Opinion 115, but not such according to Opinion 117, L. F. Spath, **372.**

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†*Lithacoceras dogouense* **sp. nov.** Dogou, Ethiopia, Jurassic, G. Scott Bull. Amer. Mus. nat. Hist. **82** 3 1943 p. 71 pl. 19 f. 1–4 text-fig. 7.

†*Lytohoplites caribbeanus* **sp. nov.** Viñales limestone, Late Jurassic, Cuba, R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942 p. 1,453 pl. 7 f. 1–9.

†*Mortoniceras* aff. *M. texanum* (Roemer) fig., L. W. Stephenson & W. H. Monroe **379.**

†*Paciceras* **gen. nov.** p. 110 (268) *Coahuilites* type *P. pacifica* **sp. nov.** La Mesa p. 111 (269) pl. 17 f. 9, 10; *P. gerthi* **sp. nov.** La Mesa p. 112 (270) pl. 16 f. 6, 7, A. A. Olsson Bull. Amer. Paleont. Ithaca **28** 111 1944 p. 6 (164), 18 (176).

†*Paraceltites rectangularis* **sp. nov.** Permian, Las Delicias, Coahuila, Mexico, A. K. Miller Spec. Pap. Geol. Soc. Amer. **52** 1944 pp. 73, *123* pl. 4 f. 7, 8.

†*Parodontoceras butti* p. 1,454 pl. 7 f. 10–12; *P. antilleanum* p. 1,455 pl. 8 f. 4–9; **spp. nov.** Viñales limestone, Late Jurassic, Cuba, R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942.

†*Perisphinctes* (genotype *Ammonites biblex* Sow.), *P. vokesi* Dougou p. 66 pl. 10 f. 3, 4 text-fig. 3; *P. spathi* Dougou p. 67 pl. 13 f. 2, 4 text-fig. 4; **spp. nov.** Jurassic, Ethiopia, G. Scott Bull. Amer. Mus. Nat. Hist. **82** 3 1943.

†*Phylloceras pinarense* **sp. nov.** Viñales limestone, Cuba (Late Jurassic), R. W. Imlay Bull. Geol. Soc. Amer. Washington D.C. **53** 10 1942 p. 1,442 pl. 1 f. 1–9.

†*Physodoceras dogouense* p. 79 pl. 18 f. 1, 2 text-fig. 14; *P. browni* p. 81 pl. 22 f. 2, 3 text-fig. 17; Dogou, Ethiopia **spp. nov.** Jurassic, G. Scott Bull. Amer. Mus. nat. Hist. **82** 3 1943.

†Popanoceratacea **superfam. nov.** Popanoceratidae, Cyclolobidae and Perrinitidae, A. K. Miller Spec. Pap. Geol. Soc. Amer. **52** 1944 p. 104.

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†*Pronorites arkansasensis* Smith, figs., A. K. Miller & J. B. Owen **283.**

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†*Pseudogastrioceras haacki* **sp. nov.** Permian, Dufunta secn., Las Delicias, Mexico, A. K. Miller Spec. Pap. Geol. Soc. Amer. **53** 1944 pp. 73, *92* pl. 27 f. 1–3 text-fig. 9B.

†*Pseudoparalegoceras priscoense* **sp. nov.** in limonite concretions in the "Pennsylvanian Caney" shale along a small creek N.-W. of Frisco, Pototoc Co. Oklahoma, A. K. Miller & J. B. Owen J. Paleont. Menasha Wis. **18** 5 1944 p. 427 pl. 66 f. 1, 2 text-fig. 2A. —†*P. friscoense* **sp. nov.** (John Britts Owen Coll. State University, Iowa, No. 13,965) N.-W. Frisco, Pontotoc Co. Oklahoma, A. K. Miller & J. B. Owen J. Paleont. Menasha, Wis. **18** 5 1944 p. 427 pl. 66 f. 1, 2 text-fig. 2A.

†*Pseudoschistoceras* **gen. nov.** type *P. simile* **sp. nov.** ¼ to ½ mile S. of Barrabiddy Dam, Wandagee Station, N.-W. Div. Western Australia, C. Teichert J. Paleont. Menasha, Wis. **18** 1 1944 pp. 87, 88 pl. 17 f. 1–5 text-fig. 4.

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10. CRUSTACEA

ARRANGED BY

J. P. HARDING, Ph.D.

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II. TRILOBITA

ARRANGED BY

C. J. STUBBLEFIELD, D.Sc., F.R.S.

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62.—Renaud, A. & **Lucas,** G. Note sur la faune dévonienne des environs de Livré (Ille-et-Vilaine). C.R. Sommaire Séances Soc. géol. minéral. Brétagne Rennes **2** 3 1936 pp. 26, 27.

Resser, C. E. *vide* Ulrich.

Resser, C. E. [Obituary] *vide* Howell **32.**

63.—Ruedemann, R. & **Howell,** B. F. Impression of a Worm on the Test of a Cambrian Trilobite. J. Paleont. Menasha Wis. **18** 1 1944 p. 96 pl. xix.

64.—Sahni, M. R. Palaeogeographical Revolutions in Indo-Burmese Region and neighbouring Lands. Proc. Indian Sci. Congr. **28** (Benares 1941) 2 1942 pp. 121–153.

Sanford, J. T. *vide* Howell.

65.—Schwarzbach, M. Review 106.

Frantzen, W. Über das Vorkommen einer unterkarbonischen Trilobitenfauna in Schiefern bei Fels im Frankenwald. Zbl. Mineral. Stuttgart [B] 1940 pp. 29–31 *in* Palaeont. Zentrabl. **15** 1940/41 1941 p. 31.

66.—Schwarzbach, M. Trilobitae 635. Geol. Zentralbl. B, Pal. Zentralbl. **16** 5 1941 p. 208. [See Ulrich & Resser **74.**]

67.—Segaud, J. & **Termier,** H. Sur l'Ordovicien du Djebel Tachilla (Maroc Sud-Ouest). C.R. somm. Soc. geol. France 1933 p. 33.

68.—Sinclair, G. W. Some Ordovician Trilobites from Ontario. Trans. Canad. Inst. Toronto **25** 1 1944 pp. 15–20 pl. i.

69.—Snodgrass, R. E. Evolution of the Annelida, Onychophora and Arthropoda. Smithson. misc. Coll. **97** 6 1938 159 pp. 54 text-figs. [Trilobita text-figs. 46, 48, 54.] [See also **Tétry 73.**]

70.—Stephens, J. V., **Edwards,** W., **Stubblefield,** C. J. & **Mitchell,** G. H. The Faunal Divisions of the Millstone Grit Series of Rombalds Moor and Neighbourhood. Proc. Yorks. Geol. Soc. **24** 5 for 1941 1942 pp. 344–372 pl. xxxi.

71.—Stubblefield, C. J. Permian Trilobites from Irwin River District, Western Australia. [Appendix to **Teichert 72.**] J. Paleont. Menasha Wis. **18** 5 1944 pp. 462–3.

Tafur, I. *vide* Newell.

72.—Teichert, C. Permian Trilobites from Western Australia. J. Paleont. Menasha Wis. **18** 5 pp. 455–463 pl. lxxvii.

Termier, H. *vide* Segaud.

73.—Tétry, A. Quelle est la place des Trilobites dans l'arbre généalogique ? Rev. Scient. Paris **77** nos. 11–12 1939 pp. 675–676.

74.—Ulrich, E. O. & **Resser,** C. E. *Dikelocephalus regalis* nom. nov. Senckenkergiana **22** 1940 p. 34. [Not seen, *see* **Schwarzbach 66.**]

Ulrich, E. O. [Obituary] *vide* Bassler **13.**

Unklesbay, A. G. *vide* Miller.

75.—Weller, J. M. Permian Trilobite Genera. J. Paleont. Menasha Wis. **18** 4 1944 pp. 320–327 pl. xlix.

76.—**Wheeler,** H. E. Lower and Middle Cambrian Stratigraphy in the Great Basin Area. Bull. Geol. Soc. Amer. Washington, D.C. **54** 12 1943 pp. 1781–1822 2 pls. 5 figs.

Whitmore, jr., F. R. *vide* Olsen.

77.—**Yovanovitch,** B. Les boutonnières de Paléozoïque entre Casablanca et Azemmour. C.R. Somm. Soc. géol. France 1933 p. 31.

II.—SUBJECT INDEX.

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General Works.—Opinions and Declarations of International Commission on Zoological Nomenclature **1–11.**—Brazil, Oliveira & Leonardos **49.**—Cambrian zoning by Trilobites in North America and correlations of zones, Howell & others **34.**—Permian Trilobites Weller **75.**

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Reviews and Abstracts.—Cox **20**; Decker **21**; Howell **30, 31**; Howell & Sanford **33**; Kindle **37**; Schwarzbach **65, 66**; Tétry **73.**

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Museum Collections.—Refiguring and redescription of many Lévis specimens described by E. Billings, Rasetti **52.**

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Colour-markings.—Black spots of irregular size and shape, densely but indiscriminately scattered over pleural and axial region of a brownish-grey

pygidium of *Ditomopyge meridionalis* interpreted as colour markings of the kind seen in many recent Crustacea, TEICHERT **72**.

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Segmentation.—Assumed that the four pairs of lateral grooves appearing on the protaspid glabella produce ridges for muscle attachments, their formation does not represent the process of segmentation but "unquestionably they mark the primary intersegmental lines of the segments united in the larval body." Post-cephalic segments produced by teloblastic growth from a small region behind the glabella (in the protaspis) and "therefore clearly secondary somites," SNODGRASS **69**.

Developmental Stages.—Protaspids of *Meteoraspis* and *Arapahoia* figured, LOCHMAN & DUNCAN **40**.—Pygidia of *Goldius laphami*, 22 mm. to circa 50 mm. in length, illustrated and described, MILLER & UNKLESBAY **44**.

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General Evolution and Taxonomy of Group.—From the Generalized Annelids come the Protarthropoda (a theoretical group with hardened integuments but retaining non-sclerotized areas between the primary segments, also with the first development of lateral compound eyes, head of one segment with filamentous appendages, body appendages little differentiated all of seven segments, etc.) from this group come the Prototrilobita (theoretical) giving rise first to Trilobita, then to Chelicerata (Xiphosurida, Eurypterida and Arachnida). Crustacea evolved from Protomandibulata an offshoot from the Protarthropoda. Whilst in Trilobita the protostomial segment and the first four post-oral segments unite to form a "head," in Chelicerata several additional segments take part to form a more extensive prosoma and the appendages of the prostomial segment are lost; in Chelicerata, there is greater differentiation among the somatic appendages, and commonly an extra podomere in some of their legs. The Xiphosurids "are undoubtedly the closest living representatives of the Trilobita. The prosoma and opisthosoma are compared and contrasted with the trilobite cephalon and pygidium but there is no intervening "thoracic region" in X., SNODGRASS **69**.—Trilobites considered the most primitive of Arthropoda since their 4 pairs of Gnathopods, still similar, are locomotory and respiratory and do not differ from the thoracic appendages except in the presence of gnathites on the protopodite; possibly ancestral to the Chelicera [Arachnida] or to the Mandibulata (Crustacea, etc.); some evidence reviewed and concluded that more closely related to Chelicera than to Crustacea, TÉTRY **73**.

Evolutionary trends in Blountidae, LOCHMAN in LOCHMAN & DUNCAN **40**.

Classification.— Doubtful classificatory value of axial segments in Permian trilobite pygidia, TEICHERT **72**.

Variability.—*Acheilus* species discussed with references to varying front end of glabella, RASETTI **52**.

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Ecological Associations.—Large diversified faunal assemblages of the Upper Cambrian *Cedaria* and *Crepicephalus* zones in Central Montana taken to indicate warm temperate conditions while the *Aphelaspis* zone assemblage restricted to five genera represented by large numbers of individuals may indicate cooler water, LOCHMAN & DUNCAN **40**.—Of *Anisopyge*, NICOL **48**.

Migration in Tremadoc from Europe to S. America, HARRINGTON **27**.—Migration routes of Cambrian, Ordovician, Silurian and Devonian faunas in southern Asia, SAHNI **64**.

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Cambrian (Lower).—U.S.A. (Pennsylvania), RUEDEMANN & HOWELL **63**.

Cambrian (Lower and Middle).—U.S.A. (Nevada, Arizona), WHEELER **76.**

Cambrian (Middle). — U.S.S.R., LERMONTOVA *in* MAXIMOV **39.**—U.S.A. (Wyoming), LOCHMAN & DENSON **41.**—(Scotland) PRINGLE **51.**

Cambrian (Upper).—U.S.A. (Montana, Wyoming), LOCHMAN & DUNCAN **40.**—Canada (Quebec), RASETTI **52.**—U.S.A., ULRICH & RESSER **74.**—U.S.A. (Pennsylvania), HOWELL **30.**

Tremadoc.—Argentina, HARRINGTON **27,** LEANZA **38,** ? HARRINGTON & LEANZA **28.**—Bolivia, HARRINGTON & LEANZA **29.**

Ordovician.—Argentina, HARRINGTON **27.**—Argentina, Bolivia, HARRINGTON & LEANZA **28.**—Brazil, MARQUES DE ALMEIDA **43.**—Britain, BEGG **14.**—Britain (Scotland), PRINGLE **51.**—REED **53.**—Canada (Ontario), SINCLAIR **68.**—Morocco, NELTNER **45.**—Morocco, SEGAUD & TERMIER **67.**—Morocco, YOVANOVITCH **77.** — Newfoundland, KINDLE **37.**—North America, HOWELL **31.**—Peru, NEWELL & TAFUR **46, 47.**—U.S.A. (Pennsylvania) KAY **35, 36.**

Silurian.—Argentina, HARRINGTON **27.**—Canada, KINDLE **37.**—U.S.A. (Illinois and Iowa), MILLER & UNKLESBAY **44.**—U.S.A. (N.Y.), HOWELL & SANFORD **33.**

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Carboniferous (Upper).—Belgium, DEMANET **22, 23.**—Britain, STEPHENS & OTHERS **70.**

Permian.—U.S.A., Crimea, Sicily, Central Himalayas, East Indies, WELLER **75.**—Australia (Western), TEICHERT **72,** STUBBLEFIELD **71.**—U.S.A. (Arizona), NICOL **48.**

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N.B.—*The numbers in large Clarendon type refer to the list of Titles where the full reference will be found; those in small Clarendon type to the volume number of the reference. Since all the species of the group are fossil, the † used elsewhere in the Zoological Record to indicate fossils is here omitted.*

Acaste downingiae p. 65, *A. spinosa* p. 66 Siluro-Devonian Spain, COMTE **19.**

Achatella billingsi **sp. n.** Ordovician Canada (Ontario) p. 17 pl. i figs. 1, 2, SINCLAIR Trans. Canad. Inst. Toronto **25** 1 1944.

Acheilus Raymond 1924 genus discussed and the effects in different species on the remainder of the cephalon of the glabella expanding, tapering, or being parallel-sided p. 235, *A. latus* p. 235 pl. xxxvi figs. 23, 24, *A. brevis* p. 236 pl. xxxvi figs. 36, 37, *A. microps* p. 237 pl. xxxvi fig. 39, *A. depressus* p. 237 pl. xxxvi fig. 27, *A. communis* p. 237 pl. xxxvi figs. 29, 30, *A. limbatus* p. 237 pl. xxxvi fig. 28, *A. gibbus* p. 238 pl. xxxvi figs. 40, 41 **spp. n.,** *A. marcoui* Raymond 1924 p. 235 pl. xxxvi figs. 31–35, *A. levisensis* Clark, original illustration reproduced p. 238 pl. xxxvi fig. 38 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Acrolichas see *Lichas.*

Agnostidae see *Kormagnostus, Proagnostus, Baltagnostus* **gen. n.,** *Homagnostus, Litagnostus* **gen. n.**

"*Agnostus*" *valentinus* **sp. n.** Cambrian (Upper) U.S.A. (Montana) p. 78 pl. v fig. 14, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Agnostus americanus Billings 1860 type refigured and a new cephalon p. 233 pl. xxxvi figs. 1, 2; *A. orion* Billings 1860, type refigured and two new specimens p. 233 pl. xxxvi figs. 3, 4, 7; *A. innocens* Clark 1923, original figures reproduced p. 234 pl. xxxvi figs. 14–17; *A. gladiator* Clark 1923, original figures reproduced p. 234 pl. xxxvi figs. 18, 19; *A. janei* Clark 1923 referred to synonymy of *Pseudagnostus canadensis* p. 234, *A. parilis* Hall referred to *Litagnostus* **gen. n.** p. 235, Rasetti J. Paleont. **18** 3 1944.

Agraulos cylindricus Miller 1889 referred to *Keithiella* **gen. n.** p. 243, Rasetti **52.**

Albansia ? *montanensis* Howell & Duncan 1939 description emended p. 114 pl. xv figs. 10–13, Lochman & Duncan **40.**

Albertella sp. p. 1789, Wheeler **76.**

Alokistocare packi Resser, *A. piochensis* (Walcott) p. 1789, *A. althea* p. 1794, *A.* sp. p. 1795, Wheeler **76.**

Ambonolium affine **sp. n.** Cambrian (Upper) Canada (Quebec) p. 238 pl. xxxvi fig. 57, Rasetti J. Paleont. **18** 3 1944.

Amiaspis **gen. n.** [resembles *Distazeris* Raymond 1937] for type *A. erratica* **sp. n.** Cambrian (Upper) U.S.A. (Montana) p. 68 pl. viii figs. 41–46, Lochman *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Anisopyge Girty 1908, this monotypic genus discussed, not accepted as a synonym of *Pseudophillipsia* Gemmellaro, redescribed, thorax stated to have 9 (not 7 segments), one of Girty's 'syntypes' of the genotype species, *Phillipsia perannulata* Shumard, designated 'holotype' and refigured p. 321 pl. xlix figs. 6a–7, *A.* ? *antiqua* Girty 1908 referred to *Delaria* **gen. n.** p. 321 pl. xlix figs. 1–2a, *A. inornata* Girty referred to *A.* ? *inornata* p. 321, Weller **75.**—*A.* in a study of paleoecological associations found in a faunule preserved in a deposit containing a large amount of fine detrital sediment and deduced that *A.* was a mud-dweller; referred to as a relict genus restricted in geographic range p. 556, Nicol **48.**

Ankoura apicalis **sp. n.** p. 109 pl. xiv figs. 29–31, Duncan *in* Lochman & Duncan *op. cit. infra*, *A. orbiculata* **sp. n.** p. 109 pl. xiv figs. 32–41, Lochman *in* Lochman & Duncan *A. sublettensis* revised generic reference for *Kingstonia sublettensis* Miller 1936 p. 110 pl. xiv figs. 51–54 Cambrian (Upper) U.S.A. (Montana), Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Anomocare (*Metanomocare*) *petaloides* p. 21, *A. separata* **sp. nondescr.** p. 21, Lermontova *in* Maximov **39.**

Anomocarella ? *planifrons* Walcott 1914 referred to *Lauzonella* **gen. n.** p. 244, *A. belli* Walcott 1914 to *Loganellus* p. 247, Rasetti **52.**

Anomocarella onusta Walcott 1916 description supplemented and referred to *Coosella* p. 45 pl. v figs. 17–23, Lochman & Duncan **40.**

Anomocaridae Poulsen 1927 see *Coosella*, *Coosia*, *Maryvillia*.

Anoria sp. p. 1794, *A. tontoensis* (Walcott) p. 1796, Wheeler **76.**

Apatokephaloides Raymond 1924 genus discussed p. 238, *Dikelocephalus pauper* Billings referred to this genus, type refigured with other new specimens p. 238 pl. xxxvi figs. 42, 43, *A. inflatus* Clark referred with reserve to *A. pauper* p. 238, Rasetti J. Paleont. **18** 3 1944.

Apatokephalus, reference of *Protapatokephalus* to *Richardsonella* does not impair Raymond's interpretation of these trilobites as *Apatokephalus* ancestors p. 255, Rasetti **52.**

Aposolenopleura carinata p. 239 pl. xxxvi fig. 48, *A. platyfrons* p. 239 pl. xxxvi fig. 47, *A.*? *brevifrons* p. 239 pl. xxxvi fig. 46 **spp. n.**, *A. dunbari*, a species described by Raymond from Vermont now described and figured from Quebec p. 239 pl. xxxvi figs. 44, 45, Cambrian (Upper) Canada (Quebec), Rasetti J. Paleont. **18** 3 1944.

Arapahoia [misprinted as *Arapahola* p. 116] *aspinosa* p. 116 pl. x figs. 8–13, *A. constricta* p. 116 pl. x fig. 24, *A. neihartensis* p. 119 pl. x figs. 25–29 **spp. n.** Lochman *in* Lochman & Duncan *op. cit. infra*, *A. convexa* p. 117 pl. x figs. 30–25, *A. keeganensis* p. 118 pl. x figs. 16–20 **spp. n.** Duncan *in*

LOCHMAN & DUNCAN, *A.* cf. *neihartensis* p. 119 pl. x figs. 21–23, *A. snowiensis* Howell & Duncan 1939 revised description p. 120 pl. xv figs. 1–9, *A.* sp. undet. protaspid. p. 121 pl. x fig. 15 Cambrian (Upper) U.S.A. (Montana), *A typa* Miller 1936 p. 121 pl. x fig. 14, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Arionellus cylindricus Billings 1860 made genotype of *Keithiella* **gen. n.** p. 243, pl. xxxix fig. 39–41, RASETTI J. Paleont. **18** 3 1944.

Arctinurus thompsoni **sp. n.** for *A. bolteni* Worthen & Meek 1875 *non* Bigsby, p. 364 pl. lviii figs. 1, 2 Silurian U.S.A. (Illinois), MILLER & UNKLESBAY J. Paleont. **18** 4 1944.

Armagnostus Howell 1937 type material examined and genus referred to synonymy of *Homagnostus* Howell 1935 p. 139, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Armonia lata revised description and generic assignation for *Perioura lata* Howell & Duncan 1939 p. 122 pl. xv figs. 29–37, *A. elongata* (Walcott), the genotype discussed p. 123, *Perioura masoni* Resser referred to *Armonia* p. 123, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Asaphellus megacanthus **sp. n.** Tremadoc Argentine p. 532 pl. i figs. 1, 2, LEANZA Notas Mus. La Plata **6** 2 1941.

Asaphidae see *Hoekaspis, Basilicoides.*

Asaphus expansus from Sweden, analysis of carapace gave 0·085 per cent. P_2O_5 other analyses of carapace plus some infilling matrix gave 0·125 per cent. and 1·108 per cent. P_2O_5 p. 1181, CAYEUX **18.**

Asaphus near *A. armoricanus* de Tromelin recorded from Morocco p. 32, YOVANOVITCH **77.**

Asteropyge barrandei p. 5, RENAUD **58,** p. 3, RENAUD **59.**—*A. limbata* Schlüter ? p. 26, Devonian France, RENAUD & LUCAS **62.**—*A. michelini* Roualt p. 3, RENAUD **57,** p. 23, RENAUD **61.**—*A.* aff. *michelini* (Roualt) p. 3, *Asteropyge* spp. pp. 5, 6, MAILLEUX **42.**—*A. munieri* Oehlert p. 7, RENAUD **55,** *A. munieri* p. 6, RENAUD **56.**

Ataktaspis **gen. n.** [Leiostegiidae] for type *A. modesta* **sp. n.** Cambrian (Upper) U.S.A. (Montana) p. 102 pl. xiii figs. 18–26, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Baltagnostus **gen. n.** [Agnostidae (Agnostinae)] for type [*Proagnostus* ?] *centerensis* Resser [1938] p. 138, *B. beltensis* **sp. n.** p. 138 pl. xii figs. 3–5 Cambrian (Upper), U.S.A. (Montana) *B. maryvillensis* (Resser) p. 138, LOCHMAN *in* LOCHMAN & DUNCAN, Special Papers Geol. Soc. Amer. **54** 1944.

Basilicoides Harrington 1937, lateral pygidial spines described in *B. taurinus* p. 138 pl. i figs. 6, 10, pl. ii figs. 1, 2, pl. iii figs. 1–3 considered of Arenig age rather than Llandeilo as previously p. 139, Argentina *Basilicoides* Ma 1938 renamed *Dolerobasilicus* **nom. n.** p. 140, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942.

Bathyurellus sp. aff. *B. brevispinus* Raymond p. 12 suggests Chazyan age for Hatter Formation of Pennsylvania, KAY **35.**

Bathyurus (*Raymondites*) **subgen. n.** for type *B. ingalli* Raymond 1913 p. 15 pl. i figs. 9–11, *B.* (*R.*) *spiniger* (Hall) p. 16, *B.* (*R.*) *bandifer* **sp. n.** p. 17 pl. i figs. 12, 13 Ordovician Canada (Ontario), SINCLAIR Trans. Canad. Inst. Toronto **25** 1 1944.

Bayfieldia Clark 1924 genus described, and suggested that *Corbinia* Walcott 1924 may be a synonym p. 239, *B. tumifrons* Clark additional description and new specimens figured p. 239 pl. xxxvi figs. 49, 50, RASETTI J. Paleont. **18** 3 1944.

Beltella ulrichi (Kayser) Harrington p. 351 pl. ii fig. 5 Tremadoc Bolivia, HARRINGTON & LEANZA Rev. Mus. La Plata N.Z. Paleont. **2** 1943.

Bienella **gen. n.** [Komaspidae] for type *B. problematica* **sp. n.** p. 64 pl. iv figs. 13–16, *B.*? sp. p. 66 pl. iv fig. 26 Cambrian (Upper), U.S.A. (Montana), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Bienvillia Clark 1924 genus discussed and *Diatemnus* Raymond 1937 considered a synonym, *B. corax* (Billings 1865) emend. to exclude pygidium referred to *Loganopeltis.*, type and new specimens figured p. 240 pl. xxxvi figs. 51, 52, Rasetti J. Paleont. **18** 3 1944.

Blountia nixonensis p. 43 pl. iv figs. 7–12, *B. cora* p. 51 pl. viii figs. 7–11, *B. janei* p. 52 pl. viii figs. 1–6, *B. carlotta* p. 84 pl. xi figs. 28–32 **spp. n.** Lochman *in* Lochman & Duncan *op. cit. infra*; *B. montanensis* p. 53 pl. viii figs. 29–34, *B. beltensis* p. 84 pl. xi figs. 20–27, *B. ovata* p. 86 pl. xi figs. 1–4 [5?], *B.? expansa* p. 87 pl. xi figs. 17–19 **spp. n.**, Duncan *in* Lochman & Duncan, *B.* cf. *carlotta* p. 85 pl. xi fig. 34, *B.* aff. *janei* p. 85 pl. xi figs. 11, 12, *B.* spp. undet. p. 87 pl. xi figs. 9–10 pl. xvii, 16–18. Cf. *B.* sp. undet. p. 87, *B. dunoirensis* Miller, 1936 cotype cranidia of this species referred to *Syspacheilus* [*quod vide*] cotype pygidium retained in *Blountia* p. 131 Cambrian (Upper), U.S.A. (Montana), Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944. See also *Blountina*.

Blountia sp. p. 1792, Wheeler **76.**

Blountidae **fam. n.** for *Blountia*, *Blountiella*, *Blountina* **gen. n.** pp. 42, 35 Lochman *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Blountiella cordilleria **sp. n.** Cambrian (Upper), U.S.A. p. 54 pl. viii figs. 23–28, *B. lata* Resser 1938 synonymised under *B. rogersvillensis* Resser and referred to *Blountina* **gen. n.**, *B. anaxis* (Walcott) excluded from this genus and the Blountidae **fam. n.** p. 54, *B. alemon*, *B. buttsi* p. 54 Duncan *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Blountina **gen. n.** [polyphyletic genus ex *Blountia* Blountidae **fam. n.**] for type *B. eleanora* **sp. n.** p. 55 pl. viii figs. 35–40, *B. triangularis* **sp. n.** p. 57 pl. viii figs. 12–18, Cambrian (Upper), U.S.A. (Montana); *Blountia rogersvillensis* Resser (= *Blountiella lata* Resser) referred to *Blountina* p. 56, Lochman *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Brachymetopus and (*Brachymetopina*) *woodwardi* Whidborne redescribed p. 122, *B.* (*B.*) sp. new generic reference for two pygidia figured by Whidborne 1896 as *Phillipsia hicksi* p. 124, Reed **54.**

Brachymetopus sp. and *B.* (*Brachymetopina*) sp. listed from Upper Carboniferons (Millstone Grit) Britain p. 356, Stubblefield *in* Stephens & others **70.**

Brassicephalus snowyensis p. 124 pl. xvi figs. 24–26, *B. wolfensis* p. 124 pl. xiii figs. 32–34 **spp. n.**, *B.* sp. undet. p. 125 pl. xiii fig. 42 Cambrian (Upper), U.S.A. (Montana), Lochman *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Bridgeia **gen. n.** [Menomonidae] for type *B. mirabila* **sp. n.**, Lochman *in* Lochman & Duncan Cambrian (Upper), U.S.A. (Montana) p. 133 pl. xiii figs. 7–12, Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Briscoia ? *devinei* revised generic reference for *Dikelocephalus d.* Billings 1865, type refigured with new specimens p. 240 pl. xxxvii figs. 13–15, Rasetti J. Paleont. **18** 3 1944.

Brongniartella trentonensis (Collie) useful fossil in stratigraphy p. 111, Kay **36.**

Bynumia lata **sp. n.** p. 112 pl. xvi figs. 14–20, Lochman *in* Lochman & Duncan, *B. eumus* Walcott supplementary description p. 111 pl. xiv figs. 1–6 Cambrian (Upper), U.S.A. (Montana), Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Calavia [sic.] ? *nevadensis* Walcott p. 1804, Wheeler **76.**

Calmonia signifer Clarke p. 316 pl. i fig. 8, *C. s. micrischia* p. 314 pl. i fig. 9, *C. subseciva* Clarke p. 316 pl. i fig. 11, *C.*? *gonzagana* Clarke p. 314 pl. i fig. 10, Oliveira & Leonardos **49.**

Calymene blumenbachi from Gotland analysis of carapace plus some infilling matrix gave 0·353 per cent. P_2O_5 p. 1181, Cayeux **18.**

Calymenidius **gen. n.** [superficial resemblance to *Calymene* may indicate no real affinity] for type *C. tuberculatus* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 240 pl. xxxvi fig. 54, Rasetti J. Paleont. **18** 3 1944.

Cedaria nixonia **sp. n.** p. 94 pl. x figs. 2–7 LOCHMAN *in* LOCHMAN & DUNCAN, *C.* sp. undet. p. 95 pl. x fig. 1, Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Cedariidae Raymond 1937 see *Cedarina* and *Cedaria*.

Cedarina alberta p. 88 pl. xvii figs. 11–15, *C. prima* p. 92 pl. xvi figs. 1–8, *C. victoria* p. 93 pl. xvii figs. 19–29 **spp. n.**, LOCHMAN *in* LOCHMAN & DUNCAN *op. cit. infra*, *C. obtusans* p. 91 pl. xvi figs. 30–37 **sp. n.**, DUNCAN *in* LOCHMAN & DUNCAN, *C. cordillerae* new generic reference for *Piedmontia cordillerae* Howell & Duncan 1937, and revised description p. 89 pl. xvii figs. 1–10, *C.* sp. undet. p. 94 pl. xi figs. 6–8, *C.*? sp. undet. p. 94 pl. xiv fig. 9, Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Ceratocephala goniata stated to have three pairs of glabellar furrows and a fringe of spines round lateral cephalic margin increasing its resemblance to European *C. verneuilli*; *C.* **sp. n.** from Newfoundland p. 1469, KINDLE **37**.

Cheiropyge Diener 1897 genus discussed, original figure of holotype of genotype species, *C. himalayensis* Diener reproduced p. 322 pl. xlix figs. 8a, b, *C. kansasensis* **sp. n.**, Permian (Lower), U.S.A. (Kansas) with 7 plus segments p. 322 pl. xlix fig. 9, WELLER J. Paleont. **18** 4 1944.

Clavaspidella howelli (Walcott) p. 1790, *C. enucleata* Resser p. 1794, WHEELER **76**.

Clevelandella volux (Hall) transferred to *Weeksina* p. 73, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Coelaspis sp. p. 1792, WHEELER **76**.

Conocephalites devinei Matthew 1893 referred to *Briscoia* ? p. 240, RASETTI **52**.

Conocephalites sulzeri p. 285 Morocco, NELTNER **45**.

Coosella beltensis p. 81 pl. xii figs. 28–30, *C. occidens* p. 82 pl. xii figs. 31–34, **spp. n.**, *C. prolifica* Lochman p. 83 pl. xii figs. 35, 36, *C. onusta* revised description and generic assignation for *Crepicephalus onustus* Whitfield 1878 p. 45 pl. v figs. 17–23, Cambrian (Upper), U.S.A. (Montana), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Coosia grandis p. 47 pl. vi figs. 23–31, *C. modesta* p. 48 pl. vi figs. 1–6 **spp. n.**, LOCHMAN *in* LOCHMAN & DUNCAN *op. cit. infra*; *C.* cf. *grandis* p. 48 pl. vi figs. 20–22, *C. connata* (Walcott) Resser 1937 description supplemented p. 46 pl. vi figs. 7–8; *C. wolfensis* **sp. n.** p. 49 pl. vi figs. 11–14, DUNCAN *in* LOCHMAN & DUNCAN, *C. onusta* Resser 1937, description supplemented and referred to *Coosella* p. 45 pl. v figs. 17–23 Cambrian (Upper), U.S.A. (Montana), *C. latilimbata* Resser 1928 considered synonym of *C. expansa* Resser 1938 p. 50, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Corbinia see *Bayfieldia*.

Crepicephalidae Kobayashi 1935 see *Crepicephalus*, *Tricrepicephalus*, *Meteoraspis*.

Crepicephalus brevispinus **sp. n.** p. 57 pl. vii figs. 16–18, DUNCAN *in* LOCHMAN & DUNCAN *op. cit. infra*, *C. snowyensis* **sp. n.** p. 60 pl. vii figs. 19–22, *C. buttsi montanensis* **var. n.** p. 58 pl. vii figs. 29–32; LOCHMAN *in* LOCHMAN & DUNCAN, *C. explicatus* Resser 1938 description supplemented p. 59 pl. vii figs. 23–27, *C. buttsi* Resser 1938 description supplemented p. 58, *C.* sp. undet. 1 p. 61 pl. vii fig. 28, *C.* sp. undet. 2 p. 61 pl. vii figs. 33, 34; *C. onustus* Whitfield 1878 referred to *Coosia* by Resser 1937 here referred to *Coosella* p. 45 pl. v figs. 17–23, Cambrian (Upper), U.S.A. (Montana), *C. greendalensis* Resser considered a synonym of *C. scissilis* Resser p. 60, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Cryphaeus australis Clarke p. 316 pl. i fig. 3, OLIVEIRA & LEONARDOS **49**.

Cryptolithus nicholsoni (Reed) cephalic fringe illustrated pl. v fig. 1, BEGG **14**.

Cummingella [*Phillipsia*] cf. *derbyensis* Auct. (*non* Martin) p. 259, STUBBLEFIELD *in* FOWLER **25**.

Cybele (*Cybelella*) *expansa* **sp. n.** Ordovician Britain (Scotland) p. 62 pl. ii fig. 1, REED Geol. Mag. **81** 1944.

Cybele mira revised generic reference maintained for *Encrinurus mirus* Billings, *C. spicata* Raymond and *Cybele* **sp. n.** prove that *Cybele* s.s. ived in North American Ordovician seas contrary to previously expressed opinion; distinguishing features from *Cybeloides* discussed p. 1469, HOWELL **31**.

Cybeloides Slocum distinguished from *Cybele* only by 'the two longitudinal furrows on its cranidium' p. 1469, HOWELL **31**.

Cybeloides plana **sp. n.** Ordovician Canada (Ontario) p. 19 pl. i fig. 8, SINCLAIR Trans. Canad. Inst. Toronto **25** 1 1944.

Cyphaspis gaultieri Roualt p. 5, RENAUD **58**.

Cyrtosymbole? revised identification of *Phillipsia hicksi* Whidborne 1896 *partim* (pl. ii fig. 8), REED **54**.

Dalmanites accola Clarke p. 314 pl. i fig. 4, OLIVEIRA & LEONARDOS **49**.—*D. auriculatus* analysis of carapace plus some infilling matrix gave 0·095 per cent. P_2O_5 p. 1181, CAYEUX **18**.—*D. socialis* Barrande described from Morocco p. 289, NELTNER **45**.

Dalmanitidae see *Eudolatites*.

Delaria **gen. n.** [resembles *Ditomopyge*] for type *Anisopyge*? *antigua* Girty 1908, Permian (characteristic of Lower, rare in Middle), U.S.A. 'holotype' designated from one of Girty's syntypes and refigured p. 321 pl. xlix figs. 1–26, WELLER J. Paleont. **18** 4 1944.

Denisia Clark 1924 genus discussed, holotype of *D. eminens* Clark refigured p. 241 pl. xxxvi fig. 25, type of *D. pusilla* Clark refigured p. 241 pl. xxxvi fig. 26, RASETTI J. Paleont. **18** 3 1944.

Dikelokephalina bröggeri Clark 1924 referred to *Lauzonella* **gen. n.** p. 244, RASETTI **52**.

Dikelocephalus regalis **nom. n.** for *D. oweni* Ulrich & Resser 1930 *non* Billings 1860 p. 34, ULRICH & RESSER Senckenbergiana **22** 1940.—*D. pauper* Billings 1865 referred to *Apatokephaloides* p. 238 pl. xxxvi figs. 42, 43, *D. devinei* Billings 1865 to *Briscoia*? p. 240 pl. xxxvii figs. 13–15, *D. planifrons* Billings 1860 made genotype of *Lauzonella* **gen. n.** types refigured p. 244 pl. xxxvii figs. 22–25, *D. affinis* Billings 1865 *partim*, cephalon accepted as *Levisella*, pygidium referred to *Platycolpus* p. 246, *D. belli* Billings 1860 referred to *Loganellus* p. 247, *D.* sp. indet. Billings 1865 fig. 382 refigured and referred to *Loganellus belli* p. 247, *D. hisingeri* Billings 1865 referred to *Pseudolisania* p. 252 pl. xxxvii figs. 26, 27, *D. sesostris* Billings 1865 made genotype of *Pseudosaukia* **gen. n.** type refigured p. 254 pl. xxxix figs. 32, 33, *D. selectus* Billings 1865 type figured and referred to *Saukiella* p. 256 pl. xxxix fig. 57, RASETTI J. Paleont. **18** 3 1944.

Ditomopyge Newell 1931 discussed, *Cyphinium* Weber 1933 accepted as synonym p. 457, relationship to *Pseudophillipsia* suggested p. 461, *D. meridionalis* **sp. n.** p. 458 pl. lxxvii figs. 1–5, 7–12, one pygidium claimed to show colour markings, *D.* sp. p. 461 pl. lxxvii fig. 6 Permian, Australia (Western), TEICHERT J. Paleont. **18** 5 1944.—*D. decurtata* (Gheyselinck), holotype refigured, revised generic designation for *Phillipsia* (*Neophillipsia*), *d.* p. 320 pl. xlix figs. 3a, b Permian (Lower), U.S.A. (Kansas), WELLER J. Paleont. **18** 4 1944.—*D.* discussion of genus and value of structural features in stratigraphy, *D.* spp. from Western Australia p. 462, STUBBLEFIELD **71**.

Dolerobasilicus **nom. n.** for *Basilicoides* [Asaphidae] Ma 1938 genotype *Basilicus yokusensis* Kobayashi *non Basilicoides* Harrington 1937 p. 140, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942.

Dorypyge near *D. horrida* Matthew p. 283, *D.* sp. p. 286 Cambrian Morocco, NELTNER **45**.

Dresbachia occidentalis **sp. n.** p. 74 pl. viii figs. 19–22, *D.* sp. undet. p. 134 pl. xiv figs. 7, 8, Cambrian (Upper), U.S.A. (Montana); specific validity of *D. appalachia* Resser and *D. speciosa* Resser questioned p. 75, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Ehmania oweni (Walcott) p. 1787, WHEELER **76**.

Eldoradia lata Resser, *E. linnarssoni* (Walcott), *E. prospectensis* (Walcott) p. 1787, WHEELER **76**.

Ellipsocephalidae indet. p. 286 Morocco, NELTNER **45**.

Elrathia occidentalis (Walcott) p. 1787 *E.* sp. p. 7194, *E.* **sp. n.** p. 1795, WHEELER **76**.

Encrinurus mirus Billings interpreted as a *Cybele* s.s. p. 1469, HOWELL **31**.—*E. punctatus* from Britain (Dudley), analysis of carapace plus some infilling matrix gave 2·162 per cent. P_2O_5 p. 1181, CAYEUX **18**.

Eteraspis laeviceps (Walcott) p. 1787, WHEELER **76**.

Eudolatites Delo 1935, a European Dalmanitid genus discovered in Silurian of U.S.A. (New York) p. 1469, HOWELL & SANFORD **33**.

Gallagnostus bolivianus (Hoek) Howell p. 346 pl. ii fig. 4, HARRINGTON & LEANZA **29**.

Genevievella etelka p. 103 pl. xiii figs. 45–49, *G. rizantans* p. 104 pl. xiii figs. 43, 44, *G. spinosa* p. 104 pl. xiii figs. 35–41 **spp. n.** Cambrian (Upper), U.S.A. (Montana), *G. granulata* (Walcott) revised generic reference for this species lately referred by Resser to *Weeksina* p. 74, LOCHMAN *in* LOCHMAN & DUNCAN Social Papers Geol. Soc. Amer. **54** 1944.

Geragnostus sp. indet. p. 346 pl. ii fig. 8 Tremadoc Bolivia, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1943.

Glossopleura packi Resser p. 1790, *G. mckeei* Resser p. 1794, *G. parabola* (Hall & Whitfield) p. 1804, *G. alta* Deiss, *G.* cf. *fordensis* Deiss, *G.* cf. *nitida* Resser p. 1805, *G.* sp. 1795, WHEELER **76**.

Glyphaspis nevadensis Resser p. 1790, *G.* sp. p. 1794, WHEELER **76**.

Glyptometopus **gen. n.** for type *Solenopleura laflammei* Clark 1924, Cambrian (Upper), Canada (Quebec) cast of type figured p. 241 pl. xxxvi fig. 53, RASETTI J. Paleont **18** 3 1944.

Goldius laphami (Whitfield) pygidia described and illustrated, including some developmental stages p. 364 pl. lviii figs. 3–6, pl. lix figs. 1, 2, MILLER & UNKLESBAY **44**.—*G. gervillei* Barrande p. 3, RENAUD **57**.—*G. palifer* from Czechoslovakia analysis of carapace plus some infilling matrix gave 0·077 per cent. P_2O_5 p. 1181, CAYEUX **18**.

Grandagnostus see *Phalacroma*.

Griffithides serotinus **sp. n.** Carboniferous (Upper) Belgium p. 154 pl. vii figs. 4–6, DEMANET Mém mus. R. d'Hist. nat. Belgique **97** 1941.—*G. longicornutus* Leyh, *G. articulatus* Leyh, *G. pupuloides* Leyh p. 31, FRANTZEN *in* SCHWARZBACH **65**.—*G.* cf. *seminiferus* (Phillips) p. 259, STUBBLEFIELD *in* FOWLER **25**.—*G. tapajotensis* Katzer p. 350 pl. x figs. 8, 9, OLIVEIRA & LEONARDOS **49**.—"*G.*" sp. last representative of Trilobites in Belgium p. 146 pl. ix figs. 17, 18 Carboniferous (Upper) Belgium, DEMANET Mém. mus. R. d'Hist. nat. Belgique **101** 1943.

Hallaspis matutina (Hall) p. 69 pl. v fig. 9, LOCHMAN & DUNCAN **40**.

Hemiarges aeolus **sp. n.** Ordovician Canada (Ontario) p. 19 pl. i figs. 5–7, SINCLAIR Trans. Canad. Inst. Toronto **25** 1 1944.

Heterocaryon tuberculatum **sp. n.** Cambrian (Upper), Canada (Quebec) p. 241 pl. xxxvi fig. 55, RASETTI J. Paleont. **18** 3 1944.

Highgatea Raymond 1937 considered as synonym of *Loganellus* Devine 1863 p. 246, RASETTI J. Paleont. **18** 3 1944.

Hoekaspis schlagintweiti **sp. n.** Ordovician (Lower) Argentine p. 135 pl. i figs. 2–5, 7–9, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont **2** 1942.

Holcacephalus robustus **sp. n.** p. 76 pl. viii figs. 50–54, *H. appalachius occidentalis* **var. n.** p. 136 pl. xiii figs. 50–54, *H. tenerus* (Walcott) Lochman accepts Resser's 1938 generic assignment of this species p. 137 pl. xiii figs. 15–17 Cambrian (Upper), U.S.A. (Montana), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Holmia mickwitzi Schmidt recorded from Cambrian of Morocco pp. 102, 121, NELTNER **45**.

Homagnostus genus discussed p. 139, *Armagnostus* Howell 1937 referred to synonymy p. 139, *H.*? *lochmanae* Howell & Duncan 19 9 description revised and species referred definitely to *H.* p. 140 pl. xv figs. 21–28, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Homalonotus gervillei Barrande p. 3 Renaud **57**.—*H. g.* de Verneuil p. 23, Renaud **61**.—*H.* (*Schizopyge*) *parana* Clarke p. 316 pl. i fig. 2, *H. noticus* Clarke p. 314 pl. i fig. 1, Oliveira & Leonardos **49**.—*H.* indet. p. 289, *H. brongniarti* (determined H. Termier) p. 154 recorded from Ordovician of Morocco, Neltner **45**.—*H. brongniarti*, *H.* cf. *vicaryi* recorded from Morocco p. 32, Yovanovitch **77**.—*H.* cf. *roemeri* de Koninck pp. 65, 66 Siluro-Devonian Spain, Comte **19**.

Howellaspis **gen. n.** [resembles *Deisella*] for type *H. wellsvillensis* **sp. n.** p. 125 pl. xv figs. 18–20, Cambrian (Middle), U.S.A. (Wyoming), Lochman & Denson *in* Lochman & Duncan *op. cit. infra*; *H. snowyensis* **sp. n.** p. 126 pl. xv figs. 14–17 Cambrian (Upper), U.S.A. (Montana), Duncan *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Hungaia described and discussed, types of genotype *Dikelocephalus magnificus* Billings 1860 refigured p. 241 pl. xxxvii figs. 1–3, *H. quadrispinosa* **sp. n.** p. 242 pl. xxxvii figs. 4–7, Cambrian (Upper), Canada (Quebec), Rasetti J. Paleont. **18** 3 1944.

Idiomesus see *Stigmametopus*.

Illaenurus punctatus Raymond referred to *Tatonaspis* p. 257, Rasetti **52**.

Illaenus superstes **sp. n.** Ordovician Britain (Scotland) p. 59 pl. ii figs. 3–6, Reed Geol. Mag. **81** 1944.—*I. crassicauda* from Russia analysis of carapace plus some infilling matrix gave 0·116 per cent. P_2O_5 p. 1181, Cayeux **18**.—*I.* (*Ectillaenus*) cf. *perovalis* Murchison recorded from Morocco p. 33, Segaud & Termier **67**.—*I.* cf. *perovalis* recorded from Ordovician of Morocco p. 163, Neltner **45**.

Kainella conica Kobayashi p. 347 Harrington & Leanza 1943.

Kaskia longispina revised generic reference and description of *Phillipsia l.* Strong p. 127 pl. iii figs. 1–3, cf. *K. longispina* p. 129 pl. iii figs. 4–7, Ehlers & Humphrey Contr. Mus. Pal. Univ. Michigan Ann Arbor **6** 6 1944.

Keithia similis **sp. n.** p. 242 pl. xxxvii figs. 20, 21, *K. subclavata* (Billings) p. 242 pl. xxxvii figs. 16–19 Cambrian (Upper), Canada (Quebec), Rasetti J. Paleont. **18** 3 1944.

Keithiella **gen. n.** [related to *Ptychaspis*, *Euptychaspis* & *Keithia*] for type *Arionellus cylindricus* Billings 1860 p. 243 type refigured with other specimens pl. xxxix figs. 39–41, *K. depressa* p. 243 pl. xxxix fig. 42, *K. brevis* p. 243 pl. xxxix fig. 43 **spp. n.** Cambrian (Upper), Canada (Quebec), *K. affinis* new generic reference for *Ptychaspis a.* Raymond p. 243, Rasetti J. Paleont. **18** 3 1944.

Kingstonia montanensis **sp. n.** p. 113 pl. xiv figs. 27, 28, Lochman *in* Lochman & Duncan, *K. walcotti* Resser supplementary description p. 113 pl. xiv figs. 21–26, *K. sublettensis* Miller 1936 referred to *Ankoura* p. 110 pl. xiv figs. 51–54 Cambrian (Upper), U.S.A. (Montana) Special Papers Geol. Soc. Amer. **54** 1944.—*K.* sp. p. 1792, Wheeler **76**.

Kochaspis augusta (Walcott), *K. liliana* (Walcott) p. 1789, Wheeler **76**.

Komaspidae Kobayashi 1935 see *Bienella* **gen. n.**

Kootenia eurekensis Resser p. 1787, *K.* sp. 1789, *K.* sp. p. 1792, Wheeler **76**.

Kootenica [? error prô *Kootenia*] *rectifrons* Lermontova [Reference untraced], *K.* cf. *rectifrons* p. 22, Lermontova *in* Maximov **39**.

Kormagnostus esterius Lochman p. 77 pl. v figs. 15, 16, p. 141 pl. xii figs. 12–18, *K.* sp. undet. p. 142, Lochman & Duncan **40**

Lauzonella **gen. n.** [allied to *Levisella*] for type *Dikelocephalus planifrons* Billings 1860, types refigured and new specimens p. 244 pl. xxxvii figs. 22–25, *L. bröggeri* new generic reference for *Dikelocephalina b.* Clark 1924 p. 244 pl. xxxvii fig. 10, Cambrian (Upper), Canada (Quebec), Rasetti J. Paleont. **18** 3 1944.

Lecanopyge Raymond 1937 genus discussed p. 244, *L. prolifica* p. 244 pl. xxxvii figs. 32–34, *L. angustata* p. 245 pl. xxxvii fig. 37, *L.*? *intermedia* p. 245 pl. xxxvii figs. 35, 36, *L.*? *arenaria* p. 245 pl. xxxvii figs. 28–30 **spp. n.**, *L. expansa* Raymond p. 244 pl. xxxvii fig. 31, *L.*? *billingsi* revised

generic reference for *Loganellus b.* Clark 1924, type refigured with new specimens p. 245 pl. xxxvii figs. 38, 39 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Leiocoryphe occipitalis **sp. n.** p. 245 pl. xxxviii fig. 4, *L. gemma* Clark 1924 type refigured p. 245 pl. xxxviii figs. 1, 2, *L.? brevis* revised generic reference for *Stenopilus b.* Raymond 1924 p. 245 pl. xxxviii fig. 3 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Leiostegiidae Bradley 1925 see *Genevievella, Ataktaspis* **gen. n.** and *Nixonella* **gen. n.**

Levisella Ulrich 1930 genus described and discussed p. 246 genotype, *L. oweni* (Billings), type refigured with other specimens p. 246 pl. xxxviii figs. 5–7, *L. affinis* (Billings *partim*) type figured with other specimens p. 246 pl. xxxviii figs. 8, 9, *L. brevifrons* **sp. n.** p. 246 pl. xxxviii figs. 10–12, Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Lichas (*Acrolichas*) *tenuilobatus* **sp. n.** Ordovician Britain (Scotland) p. 61 pl. ii fig. 8, REED Geol. Mag. **81** 1944.—*L.* 2 spp. p. 23 Devonian France, RENAUD **61**.

Linguagnostus kjerulfi (Brögger) recorded from U.S.S.R. p. 21, LERMONTOVA *in* MAXIMOV **39**.

Liostracus atlasovi Lermontova [Reference untraced], *L.* cf. *altasovi* p. 21 LERMONTOVA *in* MAXIMOV **39**.

Litagnostus **gen. n.** [Agnostia] for type *L. levisensis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 234 pl. xxxvi figs. 5, 6, *L. parilis* new generic reference for *Agnostus parilis* Hall p. 235, *L. cyclostigma* new generic reference for *Phalacroma c.* Raymond p. 235, *Phalacroma parilis* Raymond *non* Hall may be synonym of *L. levisensis* p. 235, RASETTI J. Paleont. **18** 3 1944.

Llanoaspidae **fam. n.** for *Llanoaspis* and its supposed ancestor *Pilgrimia* **gen. n.** p. 66, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Llanoaspis dorothea p. 66 pl. vii figs. 7–12, *L. montanensis* p. 67 pl. vii figs. 14–15 **spp. n.**, *L.* sp. undet. p. 68 pl. vii fig. 13, U.S.A. (Montana), *L. virginica* (Resser) considered as synonym of *L. rogersvillensis* (Resser) p. 67 Cambrian (Upper), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Loganellus Devine 1863, genus described and discussed, *Highgatea* Raymond 1937 considered synonym p. 247, genotype *L. logani* plastosyntypes figured p. 247 pl. xxxviii figs. 13, 14, *L. belli* new generic reference for *Dikelocephalus belli* Billings, type refigured and other specimens p. 247 pl. xxxviii figs. 18–20, *Tostonia trunca* Raymond referred to *L. b.* p. 247. *L.? duplicatus* revised generic reference for *Tostonia d.* Raymond 1937 p. 247 pl. xxxviii fig. 24, *L.? unisulcatus* revised generic reference for *Tostonia u.* Raymond 1937 p. 248 pl. xxxviii fig. 25, *L. similis* p. 247 pl. xxxviii figs. 21–23, *L. macropleurus* p. 247 pl. xxxviii figs. 15–17 **spp. n.** Cambrian (Upper), Canada (Quebec), *L. germanus, L. laeviusculus, L. bisinuatus* new generic references for Raymond's species of *Highgatea* p. 247, *L. billingsi* Clark 1924 referred to *Lecanopyge* [quod vide] p. 245 RASETTI J. Paleont. **18** 3 1944.

Loganopeltis minuta **sp. n.** p. 248 pl. xxxviii fig. 26, *L. zenkeri* (Billings) discussed, types refigured with new specimens p. 248 pl. xxxviii figs. 27, 28, 47 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont, **18** 3 1944.

Lonchocephalus montanensis **sp. n.** Cambrian (Upper), U.S.A. (Montana) p. 70 pl. iv figs. 19–23, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Maryvillia aequa **sp. n.** p. 50 pl. iv figs. 24, 25, DUNCAN *in* LOCHMAN & DUNCAN, *M.* sp. undet. 1 p. 50 pl. iv fig. 29, *M.* sp. undet. 2 p. 51 pl. iv fig. 28, *M.* sp. undet. 3 p. 83 pl. xii fig. 21, Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

"*Menocephalus*" *sedgwicki* Billings 1860, type refigured p. 258 pl. xxxvi fig. 56, RASETTI J. Paleont. **18** 3 1944.

Menomonia prooculis **sp. n.** p. 135 pl. xii figs. 39–42, *M. semele* (Walcott), Resser's revision of this generic reference (the genotype of *Millardia*),

accepted p. 135 pl. xiv figs. 10–13, *M. optata* (Hall) p. 75 pl. iv figs. 30–33 Cambrian (Upper), U.S.A. (Montana), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Menomonidae see *Dresbachia*, *Bridgeia*.

Mesonacis bondoni **sp. nondescr.** Cambrian Morocco pp. 102, 121, NELTNER Notes et Mém. Serv. Mines et Carte géol. Maroc **42** 1938.

Metanomocare see *Anomocare*.

Meteoraspis loisi p. 64 pl. v figs. 24–26, *M. elongata* p. 98 pl. ix figs. 4–7, *M. robusta* p. 100 pl. ix figs. 11–17, *M. spinosa* p. 100 pl. ix, figs. 18–24 **spp. n.**, LOCHMAN *in* LOCHMAN & DUNCAN *op. cit. infra*; *M. keeganensis* p. 99 pl. ix figs. 1–3, 29 **sp. n.**, DUNCAN *in* LOCHMAN & DUNCAN, *M. borealis* Lochman 1938 p. 97 pl. ix fig. 10, *M.* sp. undet. p. 101 pl. ix figs. 8, 9, *M.* sp. protaspid and metaspid [sic] stages figured pl. ix figs. 25–28 Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Micmacca ellipsocephaloides recorded from Morocco p. 171, BONDON & NELTNER **15**.

Millardia Walcott, Resser's placing this genus into the synonymy of *Menomonia* accepted p. 135, LOCHMAN & DUNCAN **40**.

Modocia yellowstonensis **sp. n.** Cambrian (Upper), U.S.A. (Wyoming), DUNCAN *in* LOCHMAN & DUNCAN *op. cit. infra* p. 128 pl. xi fig. 35, *M. centralis* (Whitfield) p. 127 pl. xi figs. 40–43, *M.* cf. *centralis* p. 128 pl. xvi figs. 21, 22, *M. weedi* revised generic reference for *Solenoplura* ? *weedi* Walcott 1899 p. 128 pl. xi figs. 36–39, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Neogriffithides Toumansky 1935 discussed Toumansky's reconstruction of genotype, *N. gemmellaroi* Toumansky refigured p. 325 pl. xlix fig. 15, WELLER **75**.

Neophillipsia see *Phillipsia*.

Neoproetus Tesch 1923 genus and genotype discussed on the basis of Gheyselinck's 1937 restudy, Tesch's and Gheyselinck's illustration of *N. indicus* Tesch reproduced p. 325 pl. xlix figs. 12, 13, WELLER **75**.

Nixonella **gen. n.** [Leiostegiidae] for type *N. montanensis* **sp. n.** p. 105 pl. xiii figs. 27–31, *N.*? *wolfensis* **sp. n.** p. 106 pl. xiii figs. 13, 14, *N.* cf. *montanensis* p. 106 pl. xvi figs. 27–29 Cambrian (Upper), U.S.A. (Montana), LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Norwoodella simplex (Walcott) p. 137 pl. xiii figs. 55–58, *N.* compared and contrasted with *Arapahoia* p. 138, LOCHMAN & DUNCAN **40**.

Norwoodia tenera Walcott 1916 accepted as *Holcacephalus* p. 137, *N. simplex* Walcott 1916 accepted as *Norwoodella* p. 137, LOCHMAN & DUNCAN **40**.

Norwoodidae see *Holcacephalus*.

Ogygiocaris cf. *buchi* (Brongniart) from Peru p. 8 pl. figs. 2–4, NEWELL & TAFUR **46**.—*O.* cf. *O. buchi* (Brongniart) p. 544 pl. xcii figs. 2–4, figured from Peru, NEWELL & TAFUR **47**.

Olenellus getzi Dunbar with impression of supposed worm on cephalon p. 96 pl. xix figs. 1, 2, RUEDEMANN & HOWELL **63**.—*O.* cf. *fremonti* Walcott, *O. gilberti* Meek pp. 1786, 1804, *O. gilberti* ? p. 1789, WHEELER **76**.

Olenidae see *Plesioparabolina*, a new proparian genus.

Olenoides expansus p. 1787, WHEELER **76**.

Olenopsis zoppii (sic) recorded from Cambrian of Morocco p. 102, NELTNER **45**.

Onchonotus granulatus p. 249 pl. xxxviii figs. 35–37, *O. convexus* p. 249 pl. xxxviii figs. 41–43 **spp. n.**, *O. ylobosus* (Billings) type refigured p. 249 pl. xxxviii figs. 29–30, *O. richardsoni* (Walcott) p. 249 pl. xxxviii figs. 31–34, *O. nasutus* (Walcott) p. 249 pl. xxxviii figs. 38–40 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Onchopeltis **gen. n.** [resembles *Dunderbergia* (*Megadunderbergia*)] for type *O. spectabilis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 249 pl. xxxix figs. 1–5, RASETTI J. Paleont. **18** 3 1944.

Onychopyge Harrington 1938 renamed *Prionopyge* **nom. n.** p. 140, Harrington & Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1942.

Osceolia brevifrons Clark 1924 referred to *Pseudosaukia* **gen. n.** p. 254 pl. xxxix fig. 34, Rasetti J. Paleont. **18** 3 1944.

Otarion wilsonae **sp. n.** Ordovician Canada (Ontario) p. 18 pl. i figs. 3–4, Sinclair Trans. Canad. Inst. Toronto **25** 1 1944.

Pagetia new species recorded from Britain (Scotland) p. 252, Stubblefield *in* Pringle **51.**

Parabolina andina (Hoek) Kobayashi complete specimen figured p. 347 pl. ii figs. 1, 6, *P. pheidolopyge* Harrington p. 348 pl. ii figs. 9, 10, Tremadoc Bolivia, Harrington & Leanza Rev. Mus. La Plata N.S. Paleont. **2** 1943.

Paradoxides, exoskeletons analysed with some shale matrix from Hérault, France in analysis from two different localities gave 0·17 per cent. and 0·19 per cent. respectively p. 1180, Cayeux **18.**—*P. davidis* determined by M. Thoral from France p. 14, Aubert de la Rue, **12.**—*P. maximovi* **sp. nondescr.** p. 22 Lermontova *in* Maximov **39.**—*P. spinosus* p. 285, *P.* cf. *bohemicus* p. 284. *P. rugulosus* p. 285, *P.* cf. *harlani* p. 285, *P.* sp. p. 286, Cambrian Morocco, Neltner **45.**

Paraphillipsia Toumansky 1935 discussed, Toumansky's reconstruction of genotype *P. karpinskyi* Toumansky refigured but criticized p. 326 pl. xlix fig. 14, Weller **75.**

Peachella iddingsi (Walcott) p. 1804, Wheeler **76.**

Pennaia pauliana Clarke p. 314 pl. i figs. 5–7, Oliveira & Leonardos **49.**

Perioura, genotype species discussed p. 123, *P. lata* Howell & Duncan 1939 description revised and species referred to *Armonia* p. 122 pl. xv figs. 29–37, *P. masoni* Resser referred to *Armonia* p. 123, Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Permoproetus Toumansky 1935 discussed, Toumansky's reconstruction of genotype *P. teschi* Toumansky refigured but criticized p. 326 pl. xlix fig. 11, Weller **75.**

Peronopsis fullax [error pro *fallax*] Linnarsson p. 22, Lermontova *in* Maximov **39.**

Phacops (*Phacops*) *accipitrinu* Phillips, *P.* (*P.*) *granulatus* (Münster some of the literature discussed pp. 121–122, Reed **54.**—*P. fecundus* p. 169, *P. fecundus degener* (determined Provost) p. 171 recorded from Devonian of Morocco, Neltner **45.**—*P. latifrons* analysis of carapace plus some infilling, matrix gave 0·116 per cent. P_2O_5 p. 1181, Cayeux **18.**—*P. potieri* Bayle p. 8, Renaud **55.**—*P. p.* Bayle p. 5, Renaud **58.**—*P. p.* p. 3, Renaud **59.**—*P. p.* p. 7, Renaud **60.**

Phalacroma (*Grandagnostus*) *glandifrons* (Angelin) p. 22, Lermontova *in* Maximov **39.**

Phillipsia hicksi Whidborne 1896 lectotype chosen and referred to *Proetus*, pygidia figured by Whidborne as *P. h.* (pl. ii figs. 6, 7) referred to *Brachymetopus* and a distorted head shield (pl. ii fig. 8), to *Cyrtosymbole* ? p. 124, Reed **54.**—*P. glassi* Leyh p. 31, Frantzen *in* Schwarzbach **65.**—*P. longispina* Strong 1872 redescribed, figured and referred to *Kaskia* p. 127 pl. iii figs. 1–3, Ehlers & Humphrey Contr. Mus. Pal. Univ. Michigan Ann Arbor **6** 6 1944.—*P.* (*Neophillipsia*) from a study of the subgenotype, *P.* (*N.*) *decurtata* Gheyselinck is declared a junior subjective synonym of *Ditomopyge* p. 320 pl. xlix fig. 3a, b, Weller J. Paleont. **18** 4 1944.

Piedmontia Resser 1938 considered to be a synonym of *Bonneterrina* Lochman 1936 p. 90; *P. cordillerae* Howell & Duncan 1939 referred to *Cedarina* p. 89, Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Pilgrimia **gen. n.** [Llanoaspidae ancestral to *Llanoaspis*] for type *P. montanensis* **sp. n.** p. 107 pl. xiii figs. 1–6 Cambrian (Upper), U.S.A. (Montana), Duncan *in* Lochman & Duncan Special Papers Geol. Soc. Amer. **54** 1944.

Platycolpus Raymond 1913 genus discussed p. 250, *P. capax* (Billings) genotype new figures of types, p. 250 pl. xxxix figs. 10–12, *P. dubius* (Billings) types and other specimens

figured p. 250 pl. xxxix figs. 13–14, *P. marcoui* Clark type and other specimen figured p. 250 pl. xxxix figs. 15, 16, *P. depressus* **sp. n.** p. 251 pl. xxxix figs. 7–9 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Platydiamesus ? *levisensis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 251 pl. xxxvii fig. 40, RASETTI J. Paleont. **18** 3 1944.

Plesioparabolina **gen. n.** [Olenidae] for type *P. proparia* **sp. n.** Tremadoc ? Argentina p. 133 pl. i fig. 1, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942.

Plethagnostus see *Pseudagnostus*.

Plethometopus Ulrich 1930, type of genotype *P. armatus* (Billings) refigured p. 251 pl. xxxix fig. 25, type of *P. angustus* (Raymond) p. 251 pl. xxxix figs. 28, 29, *P. convergens* (Raymond) p. 251 pl. xxxix fig. 27, *P. laticeps* p. 251 pl. xxxix fig. 26, *P. acutus* p. 251 pl. xxxix figs. 30, 31 **spp. n.** Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.—*P. microphthalmus* Kobayashi p. 353 pl. ii fig. 3 Tremadoc Bolivia, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1943.

Plethopeltidae (Kingstoninae) see *Ankoura*, *Bynumia* and *Kingstonia*.

Prionopyge **nom. n.** for *Onychopyge* [Ceratopygidae] Harrington 1938 genotype *O. riojana* Harrington *non Onycopyge* H. Woodward 1880 p. 140, HARRINGTON & LEANZA Rev. Mus. La Plata N.S. Paleont. **2** 1942.

Proagnostus modestus **sp. n.** Cambrain (Upper), U.S.A. (Montana) p. 77 pl. v figs. 10–13, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Proboloides pessulus Clarke p. 314 pl. i fig. 12, *P. cuspidatus* Clarke p. 314 OLIVEIRA & LEONARDOS **49.**

Proetus hicksi, new generic assignation from *Phillipsia hicksi* Whidborne 1896 *partim* p. 124, REED **54.**—*P. oehlerti* Bayle p. 3, RENAUD **57.**—*P.* cf. *crassimarginatus* pp. 41, 48, *P. verneuili* p. 47 Devonian, Canada (Ontario), CALEY **16.**

Protapatokephalus Raymond considered synonym of *Richardsonella* Raymond 1924 [*quod vide*] p. 255, RASETTI J. Paleont. **18** 3 1944.

Protolenus elegans marocana **var. n.** p. 277 pl. xii figs. 1–7, pl. xiii figs. 8–13, *P. e. latouchei* [erroneously spelt latouchéi on explanation of plate] Cobbold p. 282 pl. xiii fig. 14 Cambrian Morocco, *P. latouchei* Cobbold interpretated as a variety of *P. elegans* Matthew pp. 281, 283, NELTNER Notes et Mém. Serv. Mines et Carte géol. Maroc. **42** 1938.—*P. latouchei* recorded from Morocco p. 171, BONDON & NELTNER **15.**

Pseudagnostus canadensis (Billings 1860) some of original types refigured, also new material, *Agnostus janei* Clark referred to synonymy, also *Plethagnostus gyps* Clark *partim* p. 234 pl. xxvi figs. 8–13; *P. gyps* (Clark) emend. p. 234 pl. xxxvi figs. 20–22, RASETTI J. Paleont. **18** 3 1944.

Pseudolisania hisingeri, revised generic reference for *Dikelocephalus h.* Billings, type refigured p. 252 pl. xxxvii figs. 26, 27, RASETTI J. Paleont. **18** 3 1944.

Pseudophillipsia Gemmellaro 1892, genotype, *Phillipsia sumatrensis* Roemer redescribed and original figure reproduced p. 324 pl. xlix fig. 10, *Anisopyge* Girty not considered a synonym p. 321, *Griffithides nosoniensis* doubtfully referred to this genus p. 321 WELLER **75.**

Pseudosaukia **gen. n.** [Saukiinae] for type *Dikelocephalus sesostris* Billings 1865, type refigured p. 254 pl. xxxix figs. 32, 33, *P. brevifrons* new generic reference for *Osceolia b.* Clark 1924, type refigured p. 254 pl. xxxix fig. 34 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont. **18** 3 1944.

Ptarmigania sp. p. 1805, WHEELER **76.**

Pterocephalops **gen. n.** [resembles *Pterocephalina*] for type *P. acrophthalma* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 254 pl. xxxix figs. 35–38, RASETTI J. Paleont. **18** 3 1944.

Ptychaspis ? *pauper* Walcott 1914 referred to *Apatokephaloides* p. 238 pl. xxxvi figs. 42, 43, *P. affinis* Raymond referred to *Keithiella* **gen. n.** p. 243, *P.*? *selectus* Walcott 1914 referred to *Saukiella* p. 256, RASETTI **52.**

Ptychoparia ? *devinei* Walcott 1914 referred to *Briscoia* ? p. 240, RASETTI **52.**—*P. connata* Walcott 1890, description supplemented and species referred to *Coosia* p. 46 pl. vi figs. 7, 8, LOCHMAN & DUNCAN **40.**

Quebecaspis **gen. n.** [resembles *Lonchocephalus*] for type *Q. breviceps* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 254 pl. xxxix figs. 44, 45, RASETTI J. Paleont. **18** 3 1944.

Raaschella occidentalis **sp. n.** Cambrian (Upper), U.S.A. (Montana) p. 43, pl. iv figs. 1–5, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Raymondina respecta Clark p. 255 pl. xxxix figs. 46, 47, 58, J. Paleont. **18** 3 1944.

Raymondites **subgen. n.** see *Bathyurus.*

Remopleurides hedströmi **sp. n.** Ordovician (Upper) Britain (Scotland) p. 58 pl. ii figs. 2, 2a, REED Geol. Mag. **81** 1944.

Richardsonella Raymond 1924 amended and redescribed, *Protapatokephalus* Raymond 1937 considered a synonym p. 255, types of *Dikelocephalus megalops* Billings 1860, genotype of *R.* refigured p. 255 pl. xxxix figs. 48, 49 ; *R. cristata* (Billings) types refigured p. 256 pl. xxxix figs. 50, 51 ; *R. elongata* p. 256 pl. xxxix fig. 52, *R. unisulcata* p. 256 pl. xxxix figs. 54–56, *R. convexa* p. 256 pl. xxxix fig. 53 **spp. n.** Cambrian (Upper), Canada (Quebec), *R. arctostriata* (Raymond) p. 255, *R. granulata* (Raymond) p. 255, *R. spiculata* (Raymond) p. 255, *R. belli* Raymond, referred to *Loganellus* p. 247, RASETTI J. Paleont. **18** 3 1944.

Saukiella selecta revised generic reference for *Dikelocephalus s.* Billings 1865, type figured p. 256 pl. xxxix fig. 57, RASETTI J. Paleont. **18** 3 1943.

Schizopyge see *Homalonotus.*

Solenopleura lenaica Lermontova p. 22, *S. bulusensis* **sp. nondescr.** p. 21, LERMONTOVA *in* MAXIMOV **39.**—*S. trunca* Clark 1924 referred to *Loganellus belli* (Billings) p. 247 pl. xxxviii figs. 18–20, RASETTI J. Paleont. **18** 3 1944.—"*S.*" *viola* re-examination of material by Stubblefield in collaboration with Howell [B.F.] causes change in opinion as to age from Middle to late Lower Cambrian p. 171, GREENLY **26.**—*S.*? *weedi* Walcott 1899 referred to *Modocia* p. 128 pl. xi figs. 36–39, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Solenopleurella spp. p. 1795, WHEELER **76.**

Stenopilus dubius p. 256 pl. xxxix figs. 17, 18, *S. elongatus* p. 257 pl. xxxix figs. 20, 21 **spp. n.**, *S. intermedius* Clark p. 256 pl. xxxix figs. 22–24, *S. pronus* Raymond p. 257 pl. xxxix fig. 19 Cambrian (Upper), Canada (Quebec), RASETTI J. Paleont **18** 3 1944.

Stigmametopus **gen. n.** [resembles *Idiomesus*] for type *S. levisensis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 257 pl. xxxvii figs. 8, 9, RASETTI J. Paleont **18** 3 1944.

Strenuella cf. *spinosa* Cobbold p. 283 pl. xiii figs. 15–17 Cambrian, Morocco, NELTNER **45.**

Syspacheilus dunoirensis revised generic assignation for the two cotype cranidia of *Blountia dunoirensis* Miller 1936 (the cotype pygidium being retained in *Blountia*) p. 131 pl. xi figs. 44, 45, LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Talbotina jeweli **sp. n.** p. 130 pl. xiii figs. 6–12, U.S.A. (Montana), *T. degrasensis* Lochman p. 129 pl. xii figs. 1, 2, U.S.A. (Montana and Wyoming), Upper Cambrian, LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.—*T.* ? *levisensis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 257 pl. xxxviii figs. 44–46, RASETTI J. Paleont. **18** 3 1944.

Tatonaspis levisensis **sp. n.** Cambrian (Upper), Canada (Quebec) p. 257 pl. xxxvii figs. 11, 12 ; *T. punctata* revised generic reference for *Tllaenurus punctatus* Raymond p. 257, RASETTI J. Paleont. **18** 3 1944.

Telephus subsecutus **sp. n.** Ordovician Britain (Scotland) p. 59 pl. ii fig. 7, REED Geol. Mag. **81** 1944.

Terranovella sp. undet. p. 131 pl. xvi fig. 23, Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Tostonia trunca Raymond 1937 referred to *Loganellus belli* (Billings) p. 247 pl. xxxviii figs. 18–20, *T. duplicata* Raymond 1937 to *L.*? *d.* p. 247 pl. xxxviii fig. 24, *T. unisulcata* Raymond 1937 to *L.*? *u.* p. 248 pl. xxxviii fig. 25, RASETTI J. Paleont. **18** 3 1944.

Tretaspis cerioides sortita Reed, cephalic fringe discussed and frequency data of pit distribution given p. 114 text-fig. on p. 115 pl. v figs. 2–7, BEGG **14**.

Triarthrus cf. *eatoni* (Hall) from Peru p. 8 pl. fig. 7, NEWELL & TAFUR **46**.—*T.* cf. *T. eatoni* (Hall) p. 544 pl. xcii fig. 7 Peru, NEWELL & TAFUR **47**.

Tricrepicephalus nasutus p. 63 pl. v figs. 1–6, *T. auxiliarius* p. 95 pl. xiv figs. 42–44 pl. ix fig. 29 **spp. n.**, DUNCAN *in* LOCHMAN & DUNCAN *op. cit. infra*; *T. comus occidentalis* **var. n.** p. 62 pl. v figs. 7, 8, LOCHMAN *in* LOCHMAN & DUNCAN; *T. beltensis* Resser 1937 description supplemented p. 61 pl. v figs. 27–30, *T. rex* Lochman 1940 p. 96 pl. xiv figs. 45–50, U.S.A. (Montana), *T. yellowstonensis* Resser 1937 considered a synonym of *T. texanus* (Shumard) p. 97 Cambrian (Upper), LOCHAMN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.—*T.* sp. p. 1792, WHEELER **76**.

Trinucleus ? *nordenskjoldi* p. 12 pl. fig. 6, NEWELL & TAFUR **46**.—*T.* ? *nordenskiöldi* Bulman p. 544 pl. xcii fig. 6, NEWELL & TAFUR **47**.—*T. ornatus* Sternberg described from Morocco p. 288, NELTNER **45**.

Ucekia misprint for *Ucebia* Z.R. **80** for 1743 11, 1945 p. 12.

Uncaspis dali p. 71 pl. vi figs. 18, 19, *U. discrepans* p. 71 pl. vi fig. 17 **spp. n.** DUNCAN *in* LOCHMAN & DUNCAN *op. cit. infra*; *U. modesta* p. 71 pl. vi figs. 15, 16, *U. snowyensis* p. 72 pl. vi figs. 9, 10 **spp. n.**, LOCHMAN *in* LOCHMAN & DUNCAN, *U.* sp. a p. 132 pl. xiv figs. 14–17, *U.* sp. b p. 132 pl. xiv figs. 18–20 Cambrian (Upper), U.S.A. (Montana), LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.—*U.* sp. p. 1792, WHEELER **76**.

Vidria **gen. n.** for type *V. vespa* **sp. n.** Permian (Middle), U.S.A. (Texas) p. 323 pl. xlix figs. 4a–5, WELLER J. Paleont. **18** 4 1944.

Weberides **sp. nov.** (intermediate between *W. shunnerensis* (W. B. R. King) and *W. barkei* (H. Woodward) p. 256, STUBBLEFIELD *in* FOWLER **25**.

Weeksina rara p. 73 pl. vii figs. 1, 2, *W. snowyensis* p. 73 pl. vii figs. 3–6 **spp. n.** Cambrian (Upper), U.S.A. (Montana), *W. volux* (Hall) transferred to this genus from *Clevelandella* where it was referred by Resser 1938 p. 73, *W. granulata* (Walcott) excluded from *W.* and transferred to *Genevievella* p. 74 LOCHMAN *in* LOCHMAN & DUNCAN Special Papers Geol. Soc. Amer. **54** 1944.

Zacanthoides levis (Walcott) p. 1789 *Z. typicalis* p. 1790, WHEELER **76**.

Zacompsus ? *levisensis* **sp. n.** Cambrian (Upper), Canada (Quebec) p. 258 pl. xxxix fig. 6, RASETTI J. Paleont. **18** 3 1944.

Trilobite cranidium gen. et sp. indet. p. 16 pl. fig. 8 Ordovician Peru, NEWELL & TAFUR Bol. Soc. Geol. Peru Lima **14** & **15** 1943.

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12. ARACHNIDA

TO WHICH ARE ADDED

MEROSTOMATA, PANTOPODA, TARDIGRADA, PENTASTOMIDA, MYRIOPODA, AND PROTOTRACHEATA

ARRANGED BY

E. BROWNING

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Mangora lactea SP. NOV. ♀ Los Talas, Argentina p. 331 fig. MELLO-LEITÃO Rev. Mus. La Plata n.s. Zool. **3**; *M. melanoleuca* SP. NOV. ♂ Pampa Blanca, Jujuy, ♀ Coronel Moldes, Salta, Argentina p. 150 figs.; *M. fornicata* allotype ♂ p. 150 figs. MELLO-LEITÃO Rev. Mus. La Plata n.s. Zool. **2**; *M. ornata* p. 105 fig. CHAMBERLIN and IVIE **94**.

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Sidyma multispinulosa NOM. NOV. pro *S. spinifera* Mello-Leitão (1943) nec *S. spinifera* Mello-Leitão (1929) p. 4 MELLO-LEITÃO Com. Zool. Mus. Hist. Nat. Montevideo **1**.

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Caridrassus GEN. NOV. [subfam. Drassodinae] defined p. 392; genotype *C. wheeleri* SP. NOV. ♀ Cienaga de Zapata, Cuba p. 392 figs. BRYANT Bull. Mus. Comp. Zoöl. Harvard **86**.

Drassyllus sporadicus SP. NOV. ♂ Parole, Maryland p. 10 figs. MUMA Amer. Mus. Nov. **1255**.

Echemus argentinus SP. NOV. ♂ Andalgalá, Catamarca, Argentina p. 167 figs.; *E. minutus* SP. NOV. ♀ Mojón, Salta, Argentina p. 168 fig. MELLO-LEITÃO Rev. Mus. La Plata n.s. Zool. **2**.

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Herpyllus irvingi NOM. NOV. pro *H. australis* Fox 1938 nec *Drassus australis* Holmberg 1881 p. 4 MELLO-LEITÃO Com. Zool. Mus. Hist. Nat. Montevideo **1**.

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Anyphaenella longipes SP. NOV. ♂ Los Negros, Jiquani, Cuba; ♀ Soledad, Cuba p. 432 figs. BRYANT Bull. Mus. Comp. Zoöl. Harvard **86**.

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Wulfila tricuspis SP. NOV. ♂ Oriente, Los Llanos, Cuba p. 438 fig. BRYANT Bull. Mus. Comp. Zoöl. Harvard **86**.

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Lyssomanes hieroglyphicus SP. NOV. ♀ Punta Lara, Buenos Aires, Argentina p. 371 figs. MELLO-LEITÃO Rev. Mus. La Plata n.s. Zool. **3**.

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Key to gen. from Michigan CHICKERING **95**.

Faunal list: Hispaniola, West Indies BRYANT **72**.

†GORGOPIDINAE SUBFAM. NOV. defined p. 406 PETRUNKEVITCH Trans. Conn. Acad. Arts Sci. **34**.

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[No record].

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RICINULEI

[No record]

ACARI

[With the exception of Hydrachnoidea and Ixodoidea.]

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redescrib. p. 41 figs. LUNDBLAD K. svenska Vetensk Akad. Handl. (3) **20**; *A.* (*Truncaturus*) *kenki* SP. NOV. ♂ in pond, Ann Arbor, Michigan p. 631 figs.; *A.* (*Megaluracarus*) *laversi* SP. NOV. ♂ ♀ in mountain waters, Seattle, Washington p. 633 figs.; *A.* (*M.*) *epimerosus* ♀ describ. p. 635 figs.; *A.* (*Arrenurus*) *pleopetiolatus* SP. NOV. ♂ Three Sister Lake, near Ann Arbor, Michigan p. 635 figs. MARSHALL Amer. Midl. Nat. Notre Dame **31**; *A. americanus* notes p. 57 fig.; *A. apetiolatus* notes p. 51 figs.; *A. birgei* notes p. 53 fig.; *A. expansus* notes p. 52 fig.; *A. falcicornis* notes p. 56 fig.; *A. laticaudatus* notes p. 54 fig.; *A. laticornis* notes p. 56 fig.; *A. major* notes p. 56 fig.; *A. marshallae* notes p. 53 fig.; *A. megalurus* notes p. 52 fig.; *A. muttkowskii* notes p. 54 fig.; *A. pseudocylindratus* notes p. 53 fig.; *A. trifoliatus* notes p. 55 fig. HOFF **253**; *A.* (s. str.) all redescrib. *affinis* p. 446 figs.; *A.* (s. str.) *albator* p. 456 figs.; *A.* (s. str.) *batiffifer* p. 444 figs.; *A.* (s. str.) *bicuspidator* p. 448 figs.; *A.* (s. str.) *bruzellii* p. 455 figs.; *A.* (s. str.) *claviger* p. 452 figs.; *A.* (s. str.) *compactus* p. 454 fig.; *A.* (s. str.) *crassicaudatus* p. 456 figs.; *A.* (s. str.) *crenatus* p. 451 figs.; *A.* (s. str.) *cuspidator* p. 443 figs.; *A.* (s. str.) *cuspidifer* p. 445 figs.; *A.* (s. str.) *distinctus* p. 458 figs.; *A.* (s. str.) *edentator* p. 457 fig.; *A.* (s. str.) *fimbriatus* p. 460 figs.; *A.* (s. str.) *kjerrmani* p. 443 figs.; *A.* (s. str.) *krendowskii* p. 457 fig.; *A.* (s. str.) *latus* p. 457 figs.; *A.* (s. str.) *leuckartii* p. 446 fig.; *A.* (s. str.) *maculator* p. 442 figs.; *A.* (s. str.) *neumani* p. 449 fig.; *A.* (s. str.) *nobilis* p. 461 figs.; *A.* (s. str.) *papillator* p. 454 figs.; *A.* (s. str.) *pustulator* p. 458 figs.; *A.* (s. str.) *radiatus* p. 444 figs.; *A.* (s. str.) *robustus* p. 450 figs.; *A.* (s. str.) *tetracyphus* p. 450 figs.; *A.* (s. str.) *tricuspidator* p. 447 figs.; *A.* (s. str.) *virens* p. 452 figs.; *A.* (s. str.) *werestschagini* p. 460 figs.; *A.* (*Megaluracurus*) *adnatus* p. 465 fig.; *A.* (*M.*) *caudatus* p. 465 figs.; *A.* (*M.*) *globator* p. 462 figs.; *A.* (*M.*) *membranator* p. 467 figs.; *A.* (*M.*) *mülleri* p. 466 figs.; *A.* (*M.*) *securiformis* p. 466 figs.; *A.* (*M.*) *tubulator* p. 465 figs.; *A.* (*M.*) *ussuriensis* p. 463 figs.; *A.* (*Truncaturus*) *castaneus* p. 470 figs.; *A.* (*T.*) *knauthei* p. 470 figs.; *A.* (*T.*) *stecki* p. 470 figs.; *A.* (*T.*) *truncatellus* p. 469 figs.; A. (*Micruracarus*) *bifidicodulus* p. 471 figs.; *A.* (*M.*) *biscissus* p. 473 figs.; *A.* (*M.*) *bisulcicodulus* p. 475 figs.; *A.* (*M.*) *forpicatus* p. 473 figs.; *A.* (*M.*) *karelicus* p. 474 fig.; *A.* (*M.*) *octagonus* p. 475 fig.; *A.* (*M.*) *sinuator* p. 472 figs.; *A.* (*M.*) *soochowensis* p. 476 fig.; *A.* (*M.*) *sulcator* p. 474 fig.; *A. boruzkii* p. 470 fig.; *A. bucharicus* p. 478 fig.; *A. daudihensis* p. 477 fig.; *A. innominatus* p. 478 fig.; *A. nassonowi* p. 476 fig.; *A. quadrimaculatus* p. 477 fig.; *A. rosulatus* p. 479 fig. SOKOLOW **495**; *A.* (*Arrenurus*) *bicuspidator*, *A.* (*Megaluracarus*) *cylindratus* new to Belgium fauna p. 10 COOREMAN **113**; *A. inexploratus* notes p. 98 fig. HALBERT **241**.

Athienemannia schermeri notes p. 429 figs. SOKOLOW **495**.

Atractides key to Irish spp. p. 72; *A. parvipalpis* SP. NOV. ♂ Clydagh River, near Mallow, Ireland p. 75 fig.; *A. robustus* SP. NOV. ♀ River Flesk, Killarney and River Clydagh, near Mallow, Co. Cork, Ireland p. 74 fig.; *A. thori* SP. NOV. ♀ ♂ River Flesk, Killarney, Ireland p. 73 figs. HALBERT Proc. R. Irish Acad. **50 B**; *A.* (s. str.) *anomalus* redescrib. p. 264 figs.; *A.* (s. str.) *ellipticus* redescrib. p. 265 figs.; *A.* (s. str.) *sandalensis* redescrib. p. 265 fig.; *A.* (s. str.) *turkestanicus* redescrib. p. 266 figs.; *A.* (*Rusetria*) *ussuriensis* NOM. NOV. for *semisutus* Sokolow (1934) preocc. p. 268 figs.; *A. abbreviatus* redescrib. p. 269 figs.; *A.* (*R.*) *amplexus* redescrib. p. 267 fig.; *A.* (*R.*) *wolgaensis* redescrib. p. 267 figs. SOKOLOW Faune de l'URSS **5**; *A. spinipes* new to Belgium fauna p. 6 COOREMAN **119**.

Aturus protzi new to Belgium fauna p. 8 COOREMAN **119**; *A. brachypus* notes p. 89 fig. HALBERT **241**; *A. complex* redescrib. p. 413 figs.; *A. duplex* redescrib. p. 412 figs.; *A. intermedius* redescrib. p. 410 fig.; *A. scaber* redescrib. p. 411 figs.; *A. ussuriensis* redescrib. p. 415 figs. SOKOLOW **495**.

Axonopsis complanata redescrib. p. 405 fig.; *A. gracilis* redescrib. p. 406 fig.; *A.* (*Hexaxonopsis*) *elongata* redescrib. p. 406 figs. SOKOLOW **495**.

Bandakia concreta notes p. 195 figs. SOKOLOW **495**.

Brachypoda versicolor redescrib. p. 402 figs. SOKOLOW **495**.

Calonyx cabardinicus SP. NOV. ♂ ♀ Caucasus, Russia p. 96 and p. 485 figs. SOKOLOW Faune de l'URSS **5**.

Copidognathus (s. str.) *crassirostris* deutonymph redescrib. p. 329 figs. ANDRÉ **13**.

Dadayella key to spp. p. 7; *D. clavipes* redescrib. p. 5 figs.; *D. projecta* redescrib. p. 4 figs. LUNDBLAD **298**.

Dartia borneri notes p. 196 fig. SOKOLOW **495**.

Diplodontus despiciens notes p. 50 fig. HOFF **253**; *D. despiciens* redescrib. p. 164 figs. SOKOLOW **495**.

Euthyas truncata redescrib. p. 126 figs. SOKOLOW **495**.

Eylais stagnaliformis SP. NOV. Ladoga Sea, Karelia, Russia, previously described as *E. discreta stagnalis* Sokolow but non Halbert p. 73 and p. 485 figs.; *E. setosa* var. *goldfeldi* VAR. NOV. ♂ ♀ Russia p. 78 figs. SOKOLOW Fauna de l'URSS **5**; *E. desecta* notes p. 48 fig. HOFF **253**; *E. hamata, E. rimosa, E. setosa tantilla* new to Belgium fauna p. 2 COOREMAN **113**; *E. insularis* notes p. 46 fig. HABERT **241**.

Feltria westfalica connexa VAR. NOV. ♂ ♀ River Liffey, at Ballysmuttan, Ireland p. 82 fig.; *F. rouxi romiji* notes p. 81 fig.; *F. westfalica* ♂ describ. p. 81 HALBERT Proc. R. Irish Acad. **50 B**; *F. minuta* redescrib. p. 349 figs.; *F. rubra redescrib.* p. 351 figs.; *F. zschokkei* redescrib. p. 351 figs. SOKOLOW **495**.

Forelia diaphana redescrib. p. 358 figs.; *F. ligulifera* redescrib. p. 357 fig.; *F. liliacea* redescrib. p. 356 figs.; *F. variegator* redescrib. p. 357 fig. SOKOLOW **495**; *F. variegator* new to Belgium fauna p. 8 COOREMAN **119**.

Freemania GEN. NOV. [Pionidae] defined p. 84; genotype *F. dispar* SP. NOV. ♂ Ardagh Bog, Killarney p. 84 fig. HALBERT Proc. R. Irish Acad. **50 B**.

Frontipoda americana notes p. 58 fig. HOFF **253**; *F. musculus* redescrib. p. 261 figs. SOKOLOW **495**.

Georgella apsteini redescrib. p. 160 figs.; *G. koenikei* redescrib. p. 160 figs.; *G. helvetica* redescrib. p. 161 fig.; *G. donetzensis* redescrib. p. 162 figs. SOKOLOW **495**.

Gnaphiscus affinis redescrib. p. 260 figs.; *G. ekmani* redescrib. p. 259 figs.; *G. setosus* redescrib. p. 258 fig. SOKOLOW **495**.

Huitfeldtia rectipes redescrib. p. 360 figs. SOKOLOW **495**.

Hydrachna (*Diplohydrachna*) *distincta, H.* (*D.*) *uniscutata* var. *separata* p. 3, *H.* (*Rhabdohydrachna*) *maculifera* p. 3, *H.* (*R.*) *processifera* p. 4, *H.* (*Anohydrachna*) *levis* p. 4 new to Belgium fauna COOREMAN **113**; *H. bilunata* notes p. 49; *H. magniscutata* notes p. 49 fig.; *H. rotunda* notes p. 49 fig. HOFF **253**; *H.* (*Monohydrachna*) *cruenta* redescrib. p. 100 figs.; *H.* (*M.*) *skorikowi* redescrib. p. 102 figs.; *H.* (*Diplohydrachna*) *globosa* redescrib. p. 103 figs.; *H.* (*D.*) *globosa* var. *gallica* redescrib. p. 106 fig.; *H.* (*D.*) *globosa* var. *samarensis* redescrib. p. 107 figs.; *H.* (*D.*) *goldfeldi* redescrib. p. 107 figs.; *H.* (*D.*) *conjecta* redescrib. p. 108 figs.; *H.* (*D.*) *distincta* redescrib. p. 109 figs.; *H.* (*D.*) *aspratilis* redescrib. p. 110 figs.; *H.* (*Schizohydrachna*) *uniscutata* redescrib. p. 111 fig.; *H.* (*S.*) *uniscutata* var. *sinuata* redescrib. p. 112 fig.; *H.* (*S.*) *trilobata* redescrib. p. 112 fig.; *H.* (s. str.) *geographica* redescrib. p. 114 figs.; *H.* (s. str.) *comosa* redescrib. p. 115 figs.; *H.* (s. str.) *crassipalpis* redescrib. p. 116 figs.; *H.* (s. str.) *bivirgulata* redescrib. p. 116 figs.; *H.* (s. str.) *leegei* redescrib. p. 117 figs.; *H.* (s. str.) *processifera* redescrib. p. 119 figs.; *H.* (s. str.) *kisselewi* redescrib. p. 120 figs.; *H.* (*Anohydrachna*) *denudata* redescrib. p. 121 fig.; *H.* (*A.*) *piersigi* redescrib. p. 121 figs.; *H.* (*A.*) *inermis* redescrib. p. 122 fig.; *H. eugeni* redescrib. p. 123 figs. SOKOLOW **495**.

Hydrochoreutes krameri redescrib. p. 390 figs.; *H. ungulatus* redescrib. p. 389 figs. SOKOLOW **495**.

Hydryphantes (*Hydryphantes*) *placationis, H.* (*H.*) *ruber prolongatus, H.* (*H.*) *ruber tenuipalpis* new to Belgium fauna p. 5 COOREMAN **113**; *H. tenuabilis* notes p. 50 fig. HOFF **253**; *H.* (s. str.) *ruber* redescrib. p.

144 figs.; *H.* (s. str.) *hellichi* redescrib. p. 146 figs.; *H.* (s. str.) *bayeri* redescrib. p. 147 figs.; *H.* (s. str.) *clypeatus* redescrib. p. 148 figs.; *H.* (s. str.) *affinis* redescrib. p. 149 figs.; *H.* (s. str.) *planus* redescrib. p. 149 figs.; *H.* (s. str.) *placationis* redescrib. p. 150 figs.; *H.* (s. str.) *dispar* redescrib.p. 151 figs.; *H.* (s. str.) *frici* redescrib. p. 152 figs.; *H.* (s. str.) *crassipalpis* redescrib. p. 153 figs.; *H.* (s. str.) *peroviensis* redescrib. p. 154 fig.; *H.* (s. str.) *intermedius* redescrib. p. 154 fig.; *H.* (*Polyhydryphantes*) *octoporus* redescrib. p. 156 figs.; *H.* (*P.*) *thoni* redescrib. p. 156 fig.; *H.* (*P.*) *flexuosus* redescrib. p. 157 figs.; *H.* (*P.*) *skorikowi* redescrib. p. 157 fig.; *H.* (*P.*) *dröscheri* redescrib. p. 158 figs. SOKOLOW **495**.

Hygrobates (*Rhabdotobates*) *intricates* SP. NOV. ♀ R. Tschu, Kasachstan, Russia p. 291 and p. 491 figs.; *H.* (*Dictyobates*) *fluviatilis* redescrib. p. 287 figs.; *H.* (*Rhabdotobates*) *bucharicus* redescrib. p. 292 figs.; *H.* (*R.*) *calliger* redescrib. p. 289 fig.; *H.* (*R.*) *sokolowi* redescrib. p. 290 fig.; *H.* (*R.*) *sokolowi longituberculatus* redescrib. p. 291 figs.; *H.* (s. str.) *foreli* redescrib. p. 297 figs.; *H.* (s. str.) *japonicus* redescrib. p. 300 figs.; *H.* (s. str.) *kirgiricus* redescrib. p. 300 and p, 492 figs.; *H.* (s. str.) *longipalpis* redescrib. p. 294 figs.; *H.* (s. str.) *neutralis* redescrib. p. 295 figs.; *H.* (s. str.) *nigromaculatus* var. *octoporus* redescrib. p. 299 figs.; *H.* (s. str.) *squamifer* redescrib. p. 296 fig.; *H.* (s. str.) *trigonicus* redescrib. p. 300 figs. SOKOLOW Faune de l'URSS **5**; *H.* (*Hygrobates*) *trigonicus* new to Belgium fauna p. 6 COOREMAN **113**; *H.* (*Hygrobates*) *calliger* p. 5; *H.* (*H.*) *nigromaculatus* p. 6 new to Belgium fauna COOREMAN **119**.

Kongsbergia vietsi SP. NOV. ♀ among moss on stones in bed of River Liffey at Straffan and Leixlip, Ireland p. 89 figs. HALBERT Proc. R. Irish Acad. **50 B**; *K. asiatica* redescrib. p. 417 fig. SOKOLOW **495**.

Krendowskia latissima redescrib. p. 428 figs. SOKOLOW **495**.

Lebertia (*Lebertia*) *areolata* SP. NOV. River Flesk, Killarney, Ireland p. 68 fig.; *L.* (*L.*) *brunnea* SP. NOV. ♀ in cold water stream, Muckross, Clogheren, Ireland p. 66 fig.; *L.* (*L.*) *compacta* SP. NOV. ♀ in marshes and rivers, Ireland p. 63 fig.; *L.* (*L.*) *flumenia* SP. NOV. ♀ in rivers, River Nore, Carlow, Ireland p. 62 figs.; *L.* (*L.*) *hirtipalpis* SP. NOV. ♀ River Flesk, North Kerry, Ireland p. 64 fig.; *L.* (*L.*) *minuta* SP. NOV. ♀ in cold-water stream, Muckross, Cloghereen, Ireland p. 67 fig.; *L.* (*L.*) *tenuipalpis* SP. NOV. ♀ in deep water, River Shannon, near Portumna, Ireland p. 67 fig.; *L.* (*L.*) *latiepimerata* SP. NOV. ♀ R. Flesk, Killarney p. 63 fig.; *L.* (*L.*) *tenuistriata* notes p. 65 fig.; *L.* (*L.*) *dahlmatica fragilis* VAR. NOV. ♂ River Flesk, North Kerry, Ireland p. 64; *L.* (*Hexalebertia*) *novipalpis* SP. NOV. ♀ in deep water, River Shannon at Portumna, Ireland p. 69 fig.; *L.* (*Philolebertia*) *crassipalpis* SP. NOV. ♀ in lakes and rivers, Killarney, Ireland p. 58 fig.; *L.* (*P.*) *curvipalpis* SP. NOV. ♀ dredged in Lough Gill, Sligo, Ireland p. 60 fig.; *L.* (*P.*) *koenikei* SP. NOV. ♀ River Flesk, Killarney, Ireland p. 60 fig.; *L.* (*P.*) *minutipalpis* SP. NOV. ♀ River Shannon, near Portumna, Ireland p. 61 fig.; *L.* (*P.*) *plauta* SP. NOV. ♀ River Lee, Cork and Ballysodare, Sligo, Ireland p. 59 fig.; *L.* (*P.*) *rotunda* SP. NOV. ♀ Lough Nakirke, Ireland p. 61 fig.; *L.* (*Pseudolebertia*) *mollis* SP. NOV. ♀ River Deel, Limerick, Ireland p. 69 fig.; *L.* (*Mixolebertia*) *halberti* notes p. 70 fig. HALBERT Proc. R. Irish Acad. **50 B**; *L.* (*Pilolebertia*) *caucasica* var. *cubanica* VAR. NOV. ♂ Caucasus p. 204; *L.* (*P.*) *stackelbergi* var. saxicola VAR. NOV. Lake Onega, Russia p. 206 and p. 487; *L.* (*P.*) *alekini* redescrib. p. 215 and p. 488; *L.* (*P.*) *beleensis* redescrib. p. 213 figs.; *L.* (*P.*) *caucasica* redescrib. p. 203 fig.; *L.* (*P.*) *exuta* var. *behningi* redescrib. p. 214 figs.; *L.* (*P.*) *exuta* var. *okaensis* redescrib. p. 214 fig.; *L. inaequalis* redescrib. p. 211 figs.; *L.* (*P.*) *insignis* redescrib. p. 207 fig.; *L.* (*P.*) *jenissejensis* redescrib. p. 208 figs.; *L.* (*P.*) *lepnevae* redescrib. p. 209 figs.; *L.* (*P.*) *longissima* redescrib. p. 234 and p. 490 figs.; *L.* (*P.*) *pachypalpis* redescrib. p. 210 figs.; *L.* (*P.*) *riabuschinskii* redescrib. p. 212 figs.; *L.* (*P.*) *stackelbergi* redescrib. p. 205 figs.; *L.* (*P.*) *porosa* redescrib. p. 201 figs.; *L.* (s. str.) *balcarica* SP. NOV. R. Belaja and R. Guseripl, Caucases p. 228 and p. 488 fig.; *L.* (s. str.) *shadini* SP. NOV. ♀ URSS p. 223 figs.; *L.* (s. str.) *acuta* redescrib. p. 227 and p. 489 figs.; *L.* (s. str.)

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Pauropoposis GEN. NOV. [Pauropodidae] genotype *Pauropus indigenous* Hilton (1930) p. 171 REMY Bull. Mus. Hist. nat. Paris (2) **13**.

Pauropus bostonensis SP. NOV. for *P. huxleyi* Kenyon (1895) non Lubbock p. 168 REMY Bull. Mus. Hist. nat. Paris (2) **13**.

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Silvestripus GEN. NOV. [Pauropodidae] genotype *Pauropus manus* Hilton (1933) p. 171 REMY Bull. Mus. Hist. nat. Paris (2) **13**.

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FOREWORD

THE attention of readers is directed to the fact that, beginning with Vol. 74 (1937), the systematic part of the Record is reserved only for information of purely taxonomic value. References to data on morphology, physiology, bionomics, ecology, distribution and other general problems must be looked for in the Subject Index, where they are arranged by orders under each heading. The classification of headings in the Subject Index has been revised in order to make the information more complete and readily available. It is hoped that this change will render the Record of more value for entomologists working on general problems, without affecting its importance for taxonomists.

Entomological papers written entirely from an economic point of view are omitted, but abstracts of these will be found in the *Review of Applied Entomology*.

Very brief papers, usually those dealing with a single species, are noticed either in the Subject Index or in the systematic part, but do not appear in the list of titles.

The writers of systematic papers are requested to mark new synonyms with the words (*n. syn.*), as otherwise it is impossible to ensure that they will be correctly recorded.

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I.—TITLES.

1.—Opinions and Declarations rendered by the International Commission on Zoological Nomenclature. London, 41, Queen's Gate, S.W.7. Vols. **1, 2,** and **3,** 1944. Re-issue of Opinions 1–6. Vol. **1.**

Opinion No. **151.**—On the status of the names *Lasius* Panzer, [1801–1802], *Podalirius* Latreille, 1802, *Lasius* Fabricius, [1804–1805], and *Anthophora* Latreille, 1803 (Class Insecta, Order Hymenoptera).

Opinion No. **152.**—On the status of the generic names in the Order Diptera (Class Insecta) first published in 1800 by J. W. Meigen in his "Nouvelle Classification des Mouches à deux ailes."

Opinion No. **153.**—On the status of the names *Bethylus* Latreille, [1802–1803], and *Dryinus* Latreille, [1804] (Class Insecta, Order Hymenoptera).

Opinion No. **154.**—On the status of the names *Phaneroptera* Serville, 1831, and *Tylopsis* Fieber, 1853 (Class Insecta, Order Orthoptera).

Opinion No. **155.**—On the status of the names *Callimome* Spinola, 1811, *Misocampe* Latreille, 1818, and *Torymus* Dalman 1820 (Class Insecta, Order Hymenoptera).

Opinion No. **156.**—Suspension of the rules for *Vanessa* Fabricius, 1807 (Class Insecta, Order Lepidoptera).

Opinion No. **183.**—On the principles to be observed in interpreting Article 8 of the International Code in relation to the form in which generic and subgeneric names are to be published.

Declaration No. **9.**—On the desirability of Universities including zoological nomenclature in their courses of general and systematic zoology.

No. **10.**—On the importance of forming specialist groups for the study of the nomenclature of particular divisions of the Animal Kingdom.

No. **11.**—On the need for a clear definition in the description of new genera and species of the Order and Family involved.

No. **12.**—On the question of breaches of the Code of Ethics (Declaration supplementary to Declaration 1).

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6.—Electrocuting light traps and suction light traps for catching insects. Sci. Lib. bibliogr. Ser., London no. 487 1939 2 pp. multigraph.

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8.—Adkin, G. T. The 1943 invasion of *Celerio lineata livornica* Esp. in Cornwall. Entomologist, London **77** 1944 pp. 33–38. [Lep.]

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10.—Agenjo, R. Determinación específica del Lepidóptero denominado "barrenador del arroz." Bol. Pat. veg. Ent. agríc., Madrid **12** (1943) [1944] pp. 294–298, 1 pl. 2 figs. [Lep.]

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GEOGRAPHY OR FAUNISTIC.

In this section references are given to all species recorded from Arctic or characteristic island faunas, but in other divisions reference is made only to papers dealing with monographs or revisions or giving other information of faunistic value. Small local lists and records from limited areas are not usually included.

GENERAL.

EPLING, *Drosophila pseudo-obscura* (Dipt.) and allied spp., present and past distribution, **535**; WILTSHIRE, distribution (Lep.), **1673**.

THE WORLD.

Coleoptera: VAN EMDEN, Brachyderinae (Curc.), key to genn., **529**; JEANNEL, *Pseudomasoreus* (Carab.), distribution, **856**; MARSHALL, Cyphicerini (Curc.), Old World, revision, **1059**; PIC, *Hedybius* (Malach.), revision, **1243**; WITTMER, Drilidae, catalogue, **1678**; WOLCOTT, Phyllobaeninae (Hydnocerinae) (Cler.), generic revision, **1679**.

Hymenoptera: GOETZE, honeybees, distribution of races, **660**; PATE, *Crossocerus* (Spheg.), subgenn., revision, **1207**; Pemphilidinae (Spheg.), revision, **1208**.

Lepidoptera: JANSE, Phycitinae (Pyral.), III, **850**.

Diptera: HARDY, Brachycera, distribution, **725**; ZUMPT, Stomoxydinae, genn. and subgenn., catalogue, **1725**.

Hemiptera: BARBER, *Halobates* spp. (Gerrid.), Atlantic and Pacific, **106**; JEANNEL, Henicocephalidae, monograph, **855**; SMITH, *Saissetia nigra* (Coccid.), distribution, **1455**.

Orthoptera: CHOPARD, distribution, **359**; REHN, Euthymiae (Acrid.), Old World, revision, **1301**.

ARCTIC, ANTARCTIC.

BRINCK, water beetles, Greenland, **244**; FULLER, *Notiopsylla kerguelensis* (Siphonapt.) records, **639**.

INSULAR, including NEW ZEALAND.

Azores. **Coleoptera**: MÉQUIGNON, catalogue, **1080**; new genn. and spp., **1082**.

Canary Is. **Coleoptera :** COLAS, *Calathus* (Carab.), **380.**

Christmas I., Indian Ocean. **Diptera :** HULL, *Syritta* sp. n. (Syrph.). **814.**

Falkland Is. **Coleoptera :** CAMERON, new Staphylinids, **306.**

Fiji. **Coleoptera :** BALFOUR-BROWNE, new Dytiscids, **97 ;** BLAIR, Ciids, **174 ;** JORDAN, *Alloderes* gen. et sp. n. (Anthrib.), **869 ;** ZIMMERMAN, Apioninae and Brachyderinae (Curc.), **1720 ;** *Amblycnemus* sp. n., *Ampagia* sp. n. (Curc.), Rotumah I., **1721.**—**Diptera : Amos,** *Aëdes* sp. n., p. 32, Mosq. Contr. Train. Man., Suva 1944.—STONE & BOHART, *Aëdes* new subgen., **1486.**—**Hemiptera :** DRAKE & POOR, new Tingidae, **512 ;** TUTHILL, new Psyllidae, **1560.**—**Thysanoptera :** MOULTON, genn. et spp. n., **1129.**

Hawaiian Is. **Insecta :** KRAUSS, Molokai and Maui Is., **922 ;** VAN ZWALUWENBURG, new records, 1943, **1589 ;** WILLIAMS, water-loving insects, pts. III–V, **1665.**—**Hymenoptera :** CUSHMAN, *Enicospilus, Abanchogastra* (Ichn.), revision, **429.**—**Lepidoptera :** SWEZEY, *Ethmia colonella* (Tin.), **1503 ;** larvae, keys to some spp. in gardens and homes, **1506.**—**Hemiptera :** HSIAO, *Bromeliaemiris* spp. n. (Caps.), **804 ;** LOOK & MCAFEE, new Aphid records, **1016, 1017.**—**Thysanoptera :** SAKIMURA & KRAUSS, Maui and Molokai Is., **1375 ;** SAKIMURA & NISHIDA, Kauai I., **1376.**

Low Archipelago. **Hemiptera :** LALLEMAND, *Lallemandiana fenestrata* subsp. n. (Cercop.), Gambier I., **935.**

Loyalty Is. **Hemiptera :** JEANNEL, *Didymocephalus* sp. n. (Henicoceph.), **855.**

Madeira. **Thysanura :** AGRELL, **12.**

Marshall Is. **Diptera :** STONE & BOHART, *Aëdes* sp. n. (Culic.), **1486.**

New Caledonia. **Insecta :** RISBEC, **1329.**

New Hebrides. **Coleoptera :** PAULIAN, *Euparia* sp. n. (Aphod.), Ann. Soc. ent. Fr. **110** 1941 p.78 ; ZIMMERMAN, *Douttia* gen. et sp. n. (Curc.), **1722.**—**Diptera :** HULL, new Syrphids, **814 ;** STONE & BOHART, *Aëdes* sp. n. (Culic.), **1486.**—**Hemiptera :** JEANNEL, *Didymocephalus* sp. n. (Henicoceph.), **855.**

New Zealand. **Isoptera :** KELSEY, **886.**—**Collembola :** SALMON, **1377.**

Phoenix Is. **Hemiptera :** USINGER, Capsids, Canton I., **1576.**—**Isoptera :** KELSEY, *Calotermes* sp. n., Canton I., **885.**

Samoa. **Thysanoptera :** MOULTON, *Taeniothrips* sp. n., **1129.**

Society Is. **Diptera :** HULL, *Xanthogramma* sp. n. (Syrph.), **814.**

PALAEARCTIC REGION, collectively.

Coleoptera : ESPAÑOL COLL, Opatrina (Tenebr.), key to genn., **538.**

Lepidoptera : HIGGINS, *Melitaea* (Nymph.), corrections to illustrated catalogue 1941, **774.**

Collembola : GISIN, keys, **652.**

EUROPE, collectively.

Hymenoptera : BERLAND, *Polistes* (Vesp.), list, **154 ;** NIXON, Dacnusini (Brac.), revision, **1162.**

Lepidoptera : WARREN, Argynnidi, review of classification, **1634.**

Diptera : SÉGUY, Calliphorids, monograph, **1410.**

NORTH EUROPE AND SIBERIA.

Coleoptera : BRINCK, Haliplids, Dytiscids, Gyrinids, Mongolia and Siberia, **242 ;** water beetles, S. Sweden, **245.**

Lepidoptera : ANDER, *Pseudohadena immunda* (Noct.), Sweden, **38 ;** *Adopoea* (Hesp.), Sweden, **41 ;** BENANDER, Microlepidoptera, Sweden, **138 ;** BURRAU, Sweden, **289 ;** HOFFMEYER, *Eupithecia* spp. (Geom.), Denmark, **790 ;** KJELLANDER, Sweden, records, **894 ;** NIELSEN, Zealand, list (contd.), **1161.**

Trichoptera : FORSSLUND & TJEDER, Sweden, catalogue, **603.**

Diptera : RINGDAHL, Helomyzids, Sweden, list, **1326.**

Hemiptera : OSSIANNILSSON, Psyllina, Lapland, **1186.**

Odonata : COWLEY, Karelia, Finland, **413.**

Thysanura : AGRELL, Sweden, **13** ; TUXEN, *Forbicina* (*Teutonia*) *germanica*, Sweden, **1564.**

BRITISH ISLES.

Coleoptera : BAILEY & BRITTEN, Isle of Man (contd.), **77** ; CAMERON, *Tachyporus* (Staph.), key, **307** ; DAY, Cumberland water beetles, **445** ; STAINFORTH, *Donacia* and allies, Yorkshire, **1468.**

Hymenoptera : DAY, Aculeate Hym., Cumberland, additions, **446** ; STELFOX, *Rogas* (Brac.), Ireland, **1475.**

Lepidoptera : BEIRNE, Ireland, **132** ; origin of maritime Lepidoptera of Lough Neagh, **133** ; EDELSTEN, FRYER & ROBINSON, *Hydrillula palustris* (Noct.), **522** ; FOSTER, Hertfordshire, additions, **605** ; STOKOE, butterflies, caterpillars, eggs, chrysalids, food-plants, **1482** ; TURNER, Noctuids and varr., suppl., **1559.**

Trichoptera : KIMMINS, Lake District, suppl. notes, **891.**

Megaloptera : KIMMINS, keys, **892.**

Neuroptera : KIMMINS, keys to aquatic spp., **892.**

Diptera : COLLIN, Psilidae, **387** : Anthomyzidae, revision, **388** ; GRENSTED, Tipulids, distribution, **690** ; WRIGHT, Syrphidae, N. Lancashire and S. Westmorland, **1689, 1690.**

Hemiptera : HARRISON, Coccidae, Western Is., **734.**

Odonata : LLOYD, Pembrokeshire, **1015.**

Orthoptera : FRAZER, *Chorthippus vagans* (Acrid.), first record, **620** ; UVAROV, *Acanthoxyla prasina* (Phasm.), established, **1582.**

FRANCE.

Insecta : CLEU, Ardèche basin, **371.**

Coleoptera : BALACHOWSKY, Scolytids, **81** ; JARRIGE, Staphylinids, new or little known, **853** ; JEANNEL, Caraboids, **854** ; MÉQUIGNON, Clavicornia, **1081** ; additions and corrections in catalogues, **1084** ; PAULIAN, Scarabaeids, monograph, **1210** ; TEMPÈRE, some Curculionids, **1515** ; THÉRY, Buprestids, **1517.**

Hymenoptera : BENOIST, *Megachile* (Apid.), revision, **140** ; BERLAND, Xyelidae (Tenthr.), **156.**

Mecoptera : BERLAND, *Boreus hyemalis*, **155.**

Diptera : d'AGUILAR, **16** ; ROMAN, rare mosquitos, Lyons region, **1341** ; Culicids, new records, **1342** ; SÉGUY, new or little known, **1416** ; TIMON-DAVID, islands in Gulf of Marseilles, **1527** ; Dolichopodids, Marseilles, **1530.**

Ephemeroptera : VERRIER, Auvergne, **1597** ; new records, **1600.**

Collembola : DELAMARE-DEBOUTTEVILLE, **453.**

CENTRAL AND EASTERN EUROPE.

Hymenoptera : LECLERCQ, Ichneumonids, Liége, **958** ; LECLERCQ & ENCKELS, Apids, Liége and Limbourg, **960.**

Diptera : PERFIL'EV, *Phlebotomus minutus* group (Psychod.), USSR, revision, **1228** ; *Phlebotomus* (Psychod.), USSR, **1229.**

Mallophaga : BLAGOVESHCHENSKII, URSS, **173.**

Collembola : GISIN, Switzerland, **653.**

Thysanura : WYGODZINSKY, Switzerland, **1696.**

SOUTH EUROPE.

Hymenoptera : CEBALLOS, tribes, Spain, revision, **338** ; JUNCO Y REYES, Pompilidae, Spain (concld.), **874.**

Lepidoptera : CEBALLOS & AGENJO, *Graëllsia isabelae* (Saturn.), distribution, **339.**

Hemiptera : GÓMEZ CLEMENTE, Coccids, Levante, **672.**

Thysanura : WYGODZINSKY, Portugal, **1702.**

MEDITERRANEAN ISLANDS.

Coleoptera: BALFOUR-BROWNE, Apioninae (Curc.), Cyprus, **90**.

Odonata: COWLEY, additions to list, **414**.

Protura: CONDÉ, Corsica, **391**.

NORTH AFRICA.

Coleoptera: BARBIER, region of Alexandria, **108**; COLAS, Caraboids, Adrar des Iforas, **377, 381**; ESPAÑOL COLL, Tenebrionidae, Spanish Sahara, **538**; KOCH, Staphylinids, **915**; LOTTE, Julodini, Acmaeoderini, Chrysochroini, Chalcophorini (Bupr.), Egypt, revision, **1019**; PAULIAN, Scarabaeids, Adrar des Iforas, **1214**; DE PEYERIMHOFF, *Ilamania* gen. et sp. n. (Curc.), Hoggar, **1235**; PIC, Adrar des Iforas, **1241**.

Hymenoptera: BENOIST, Apids, **141, 143**; HONORÉ, *Sphex*, revision, Egypt, **792**; *Miscophus* (Spheg.), Egypt, revision, **793**.

Hemiptera: HOSNY, Coccids, Egypt, **796**.

Diptera: SÉGUY, S. Morocco, **1412**.

Orthoptera: CHOPARD, Orthopteroidea, **360**; Moroccan Sahara, **361**; revision, **363**.

AFRICA.

Coleoptera: BORCHMANN, Lagriidae, Cistelidae, Parc National Albert, Belgian Congo, list, **206**; BRYANT, *Acolastus* (Cryptoceph.), list, **273**; BURGEON, Eumolpinae, Parc National Albert, Belgian Congo, **284**; Lymexylonidae, Parc National Albert, Belgian Congo, **285**; CORELLA, Longicorns, Spanish territories of Gulf of Guinea, **400**; DELÈVE, Parnids (Dryopids), Elmids, Parc National Albert, Belgian Congo, **454**; EGGERS, Scolytidae, Parc National Albert, Belgian Congo, **523**; GEDYE, Chyulu Hills, Kenya, **648**; GUIGNOT, Dytiscids, Gyrinids, Kamerun, **706**; JANSSENS, Dynastinae, Silphidae, Geotrupinae, Parc National Albert, Belgian Congo, revision, **851**; KOCH, *Gnophota* (Tenebr.), and related genn., keys, **916**; LABOISSIÈRE, Halticinae, Galerucinae, Parc National Albert, Belgian Congo, **929**; LEPESME, *Corus* (Lamiid.), W. Africa, key, **978**; LESNE, Bostrychidae, Parc National Albert, Belgian Congo, **985**; MADER, Coccinellidae, Part i, Parc National Albert, Belgian Congo, revision, **1048**; PAULIAN, Aphodiinae, revision, **1211**; SCHEDL, Platypodidae, Parc National Albert, Belgian Congo, **1390**; SPAETH, Cassidinae, Parc National Albert, Belgian Congo, **1463**; UHMANN, Hispinae, Parc National Albert, Belgian Congo, **1565**; VILLIERS, Languriinae, Cladoxeninae, Parc National Albert, Belgian Congo, list, **1610**.

Hymenoptera: ARNOLD, Sphegidae, Parc National Albert, Belgian Congo, **60**.

Lepidoptera: BERGER, Rhopalocera, Parc National Albert, Belgian Congo, list, **152A**; DEBAUCHE, Heterocera, Parc National Albert, Belgian Congo, **451**; EVANS, Rhopalocera, Kakamega, Kenya, **543**; MURRAY, *Cupido* (Lycaen.), revision, **1146**; STEMPFFER, Lycaenids, **1477**; WILEY & HUDSON, Nairobi, common butterflies, **1661**.

Trichoptera: MARLIER, Parc National Albert, Belgian Congo, **1058, 1058A**.

Diptera: DE BURCA, Anophelines, Eritrea, **280**; DE MEILLON & LAVOIPIERRE, Phlebotominae (Psych.), list, **468**; MATTINGLY, Anophelini, W. Africa, keys, **1071**; ROUBAUD & GRENIER, Simuliids, French Equatorial and W. Africa, **1360**; WANSON & HENRARD, *Simulium*, Léopoldville, **1633**.

Hemiptera: CHINA, Bryocorinae (Capsid.), revision, **357**; *Kamendaka* (Derb.), key, **358**; FUNKHOUSER, Membracidae, Parc National Albert, Belgian Congo, **640**; JEANNEL, Henicocephalids, Fernando Po, **858**; LALLEMAND, Homoptera, Parc National Albert, Belgian Congo, **933**; POISSON, Kamerun, aquatic spp., **1254**; VILLIERS, *Polytoxus*, *Diaspidius*, *Heteropinus* (Reduv.), revision, **1614, 1615**.

Orthoptera: GUENTHER, Phasmidae, Parc National Albert, Belgian Congo, **699**; REHN, Cyrtacanthacres group (Acrid.), **1300**; UVAROV, *Leptacris* and allied genn. (Acrid.), key, lists, **1580**.

Collembola: MARLIER, Parc National Albert, Belg. Congo, **1058B**.

MADAGASCAR AND MASCARENE ISLANDS.

COLLECTIVELY.

FLEUTIAUX, Hemirrhipinae (Col., Elat.), revision, **591**.

MADAGASCAR.

Coleoptera: FLEUTIAUX, new Elaterids, **592**, **593**; JEANNEL, *Pseudomasoreus* spp. n. (Carab.), **856**.

Lepidoptera: STEMPFFER, *Hypolycaena cobaltina* (Lycaen.) f. n., **1477**.

Diptera: HULL, *Cerioides* sp. n. (Syrph.), **814**; MESNIL, *Exorista* sp. n. (Tach.), **1086**.

Siphonaptera: ROUBAUD & GIRARD, **1359**.

Hemiptera: JEANNEL, *Stenopirates* new subgen. and spp. (Henicoceph.), **855**; LALLEMAND, *Clovia* sp. n. (Cercop.), **935**; POISSON, *Microvelia* sp. n. (Vel.), **1255**.

Orthoptera: REHN, *Malagasacris*, *Onetes* genn. et spp. n. (Acrid.), **1301**.

MAURITIUS.

Coleoptera: CAMERON, new Staphylinids, **305**.

Diptera: BARNES, *Stenodiplosis*, *Contarinia* spp. n. (Cecidom.), **110**.

CAUCASUS, WEST AND CENTRAL ASIA.

Coleoptera: ARROW, *Schizonycha* (Melol.), revision, **62**; LOTTE, Julodini, Acmaeoderini, Chrysochroini, Chalcophorini (Bupr.), Sinai, revision, **1019**; RIVNAY, *Capnodis* (Bupr.), Palestine, **1332**.

Lepidoptera: WILTSHIRE, butterflies, moths, Iraq, catalogue, **1671**; Hammar Lake, S. Iraq, **1672**.

Diptera: GUTSEVICH, mosquitos, N. Iran, **710**; *Phlebotomus* (Psychod.), USSR, **1228**, **1229**.

Hemiptera: BODENHEIMER, Coccids, Iraq, survey, **183**, **186**; Coccoidea, Iran, **187**.

Mallophaga: BLAGOVESHCHENSKIĬ, URSS, **173**.

ASIA, TROPICAL AND EASTERN.

Coleoptera: ARROW, *Schizonycha* (Melol.), revision, **62**; BALFOUR-BROWNE, *Hyphydrus* (Dytisc.), China, Japan, revision, **98**; BRINCK, Haliplids, Dytiscids, Gyrinids, Mongolia, **242**; FLEUTIAUX, Elaterids, French Indo-China, concluded, additions and corrections, **590**; GRESSITT, Cerambycinae (excl. Disteniinae, Aseminae and Lepturinae), China, keys, **693**.

Hymenoptera: MALAISE, Tenthredinoidea, S.E. Asia, **1050**; MANI, parasitic Hym., I, II, India, **1054**; MANI & MUZAFFER AHMAD, Evaniids, India, **1056**.

Lepidoptera: BRYK, Thyatirids, Drepanids, Saturniids, Bombycids, Eupterotids, Uraniids, Sphingids, Burma, Brit. India, **277**; CHIAO, Rhopalocera, Kansu Prov., **356**; CORBET, butterflies, Langkawi I., Malaya, **399**; SANDERS, Rhopalocera, Calcutta, **1378**; SCOTT, Sphingidae, Darjeeling and Sikkim (contd.), **1406**; SEVASTOPULO, Rhopalocera, Calcutta, additions, **1424**; WYNTER-BLYTH, butterflies, Nilgiris, **1710**.

Diptera: FENG, mosquitos, China, distribution, **560**; MANI, Itonidids (Cecid.), India, VI, VII, **1055**.

Hemiptera: FUNKHOUSER, Membracidae, Formosa, list, **641**; HOFFMANN, Reduviidae, China, catalogue, **789**; KATO, Membracidae, Japan, catalogue, **880**; QADRI & AZIZ, *Pyrilla* (Lophop.), India, **1271**.

Thysanoptera: SHUMSHER SINGH, India, **1436**.

Psocoptera: MENON, India, **1079**.

Isoptera: PINTO, Calotermitidae, Ceylon, **1249**.

Orthoptera: TINKHAM, *Xiphidiopsis* (Tettigon.), China, key, **1533**.

ASIATIC ARCHIPELAGO.

Coleoptera: ARROW, *Spondotriplax* (Erotyl.), key, list, **65**; BRYANT, *Nonarthra* sp. n. (Haltic.), Philippines, **271**; FLEUTIAUX, *Tetrigus* sp. n. (Elat.), **592**.

Hymenoptera : PATE, *Crossocerus* sp. n. (Spheg.), Philippines, **1207** ; WELD, *Mesocynips* sp. n. (Cynip.), Philippines, **1645**.

Diptera : HULL, *Microdon* sp. n. (Syrph.), Philippines, **815** ; STONE & BOHART, *Aëdes*, *Culex* spp. n. Philippines, **1486**.

Hemiptera : HSIAO, new Capsids, Philippines, Borneo, **804**.

Orthoptera : REHN, *Visayia* gen. et sp. n. (Acrid.), Philippines, **1301**.

INDO-AUSTRALIAN REGION.

Coleoptera : BRYANT, *Nonarthra* (Haltic.), list, **271**.

PAPUAN SUB-REGION.

COLLECTIVELY :

Coleoptera : ARROW, *Spondotriplax* (Erotyl.), key, list, **65** ; ZIMMERMAN, *Amblycnemus* (Curc.), distribution, **1724**.

Diptera : LEE, *Armigeres* (Culic.), **962**.

BISMARCK ARCHIPELAGO.

Hymenoptera : DONISTHORPE, *Polyrhachis* sp. n. (Formic.), New Ireland, **496**.

MOLUCCAS.

Coleoptera : ARROW, *Spondotriplax* (Erotyl.) sp. n., **65** ; THÉRY, *Anthaxomorphus* sp. n. (Bupr.), Ternate, **1521** ; ZIMMERMAN, *Amblycnemus* spp. n. (Curc.), Larat I., **1724**.

Lepidoptera : BROOKS, *Tenaris* (Amathus.), Aru I., Ceram, Batjan I., Gebi I., Mysol I., **254**.

NEW GUINEA.

Coleoptera : ARROW, *Spondotriplax* (Erotyl.), spp. n., **65** ; ZIMMERMAN, *Pembertonia* gen. et sp. n. (Curc.), **1723**.

Hymenoptera : DONISTHORPE, *Polyrhachis* (Formic.), spp. n., New Guinea, Waigeu I., **496** ; *Pristomyrmex* sp. n. (Formic.), **498**.

Lepidoptera : BROOKS, *Tenaris*, new spp. and ff. (Amathus.) (incl. Fergusson and Murray Is.), **254**.

Diptera : CRESSON, *Allotrichoma* sp. n. (Ephydrid.), **420**.

SOLOMON IS.

Coleoptera : BLAIR, *Cis* sp. n., **174** ; FLEUTIAUX, *Tetrigus* sp. n. (Elat.), **592** ; RAY, new Mordellids, **1295** ; ZIMMERMAN, *Telephae* sp. n. (Curc.), Proc. New England zool. Cl. **23** pp. 17–20 fig.

Diptera : BELKIN & SCHLOSSER, Anophelines, key ; *Anopheles* sp. n. (Culic.), **134** ; STONE & BOHART, *Aëdes*, new spp. (Culic.), **1486**.

AUSTRALIA.

Lepidoptera : BROOKS, *Tenaris* sp. n. (Amathus.), Dampier I., **254** ; TURNER, *Sagalassa* (Tin.), key, **1556** ; Oecophoridae (Tin.), pts. XI, XII, revision, **1557**.

Diptera : ALEXANDER, Tipulidae, II, **27** ; TAYLOR, Culicidae, VII, **1512**.

Hemiptera : EVANS, Jassids, W. Australia, **541** ; HSIAO, *Bromeliaemiris* sp. n. (Caps.), **804**.

Embioptera : DAVIS, pt. VII, **442**.

AMERICA, collectively.

Coleoptera : BLACKWELDER, check list, pts. 1, 2, **172** ; SAYLOR, *Phyllophaga rorulenta* (Melolon.), revision of group, **1386**.

Hymenoptera : BEQUAERT, *Protopolybia* (Vesp.), revision, **151** ; BRADLEY, Pompilinae (exclusive of Pompilini), revision, **225** ; MITCHELL, *Megachile* (Apid.), revision, **1108** ; WEBER, *Acropyga* (Formic.), revision, **1636**.

Lepidoptera : FERREIRA D'ALMEIDA, *Terias* (Pier.), 2nd suppl. to revision, **571** ; *Phoebis* (Pier.), suppl. to revision, **572** ; FORBES, Danainae, revisional notes, suppl., **600**.

Diptera : JOHANNSEN, Ceratopogonidae, key to genn. (N. and S. America), list of spp. (N. America), **862**.

Hemiptera : DRAKE, Cantacaderinae (Ting.), check list, **504** ; DRAKE & HARRIS, Hebridae, list, **509** ; HARRIS, *Harmostes* (Coreid.), key, check list, **729** ; *Stictopleurus* (Coreid.), revision, **730** ; HARRIS & DRAKE, apterous

Aradidae, key to genn., list of spp., **732**; SAILER, *Solubea* (Pentat.), revision, **1373**; USINGER, Triatominae (Reduv.), **1577**.

Mallophaga: CARRIKER, pt. 3, revision, **325**; *Oxylipeurus*, **327**.

Embioptera: ROSS, revision, **1347**.

Odonata: BORROR, *Erythrodiplax*, revision, **208**.

Orthoptera: REHN, group Hyalopteryges (Acrid.), revision, **1303**.

NORTH AMERICA.

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Steropus (*Feronidius* **subgen. n.** p. 804), JEANNEL Faune de France **40** 1942.

Styphlomerus dissimilis **sp. n.** E. Africa p. 80 fig., BASILEWSKY Bull. Soc. ent. Fr. **48** 1943.

Tachys bistriatus, micros, fulvicollis, algiricus see *Eotachys.*

Tachyura Mots. *quadrisignata* Duft. designated type p. 434; (s. str.), *ravouxi* **sp. n.** France p. 437 figs., JEANNEL Faune de France **39** 1941.

Triaenogenius anthioides Chaud. (= *Piezia transfuga* Dohrn), *lugubrinus* characters; *sculpturatus* **subsp. n.** *infuscatus* E. Africa p. 79, BASILEWSKY Bull. Soc. ent. Fr. **48** 1943.

Trichotichnus nitens **subsp. n.** *provincialis* France p. 630, JEANNEL Faune de France **40** 1942.

Trymosternus pyrenaeus **sp. n.** N. Africa p. 1057 (note), JEANNEL t.c.

Zacotus fredericki **sp. n.** Oregon p. 12, NUNENMACHER Pan-Pacif. Ent. **20.**—*Z. matthewsii* colour variation p. 188, HATCH & FENDER Canad. Ent. **76.**

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Agabus (*Gaurodytes*) *falkenströmi* **n. n.** for *dissimilis* Falken. nec Sharp; (*G.*) *bedeli* Zaitz. valid name for *politus* Reiche nec Marsh. p. 352, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**—*A. latissimus* see *Platynectes monostigma.*

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Antiporus bakewellii Clark (= *curtulus* Sharp) p. 348, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

Bidessus geminus and ab. *pusillus* discussed; *granularis* **n. n.** for *luridus* Lea nec MacL. p. 346, BALFOUR-BROWNE t.c.—*B. leveri* p. 98, *fijiensis* p. 99, **spp. n.** Fiji, BALFOUR-BROWNE Proc. R. ent. Soc. Lond. (B) **13.**

Chostonectes johnsonii Clark (= *latus* Sharp) p. 347, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

Colymbetes dolabratus and its subspp. discussed pp. 37–40 figs., BRINCK Opusc. ent. Lund [? 5] 1940.—*C. paykulli* **ab. n.** *zetterstedti* Sweden p. 71, BRINCK op. cit. **6** 1941.

Cybister griphodes, *mesomelas* p. 156, *diastatus* **spp. n.** Cameroons; *feraudi* ♀ p. 157, GUIGNOT Bull. Soc. ent. Fr. **47** 1942.—*C. lateralimarginalis* discussed pp. 37–43, BRINCK Opusc. ent. Lund **9.**

Deronectes discussion of subgenn. p. 186, BALFOUR-BROWNE Entomologist **77.**—*D. alpinus* **subsp. n.** *mongolicus* Mongolia p. 155 fig., BRINCK Norsk ent. Tidsskr. **6** 1943.—*D.* (*Potamonectes*) *suavis* Sharp (= *variegatus* Aubé nec Geoffr.) p. 351, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

Dytiscus amurensis **n. n.** for *frontalis* Motsch. nec Marsh.; *alaskanus* **n. n.** for *parvulus* Motsch. nec. Müll. p. 356, BALFOUR-BROWNE t.c.

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Hydroporus (*Scarodytes*) *lineatus* F. (= *thoreyi* Clark) p. 348; (s. str.) *pseudopubescens* Zimm. (= *punctatissimus* Popp. nec Aubé); *mannerheimi* **n. n.** for *humeralis* Aubé nec Marsh.; *lucasi* Reiche (= *confusus* Lucas nec Klug); *superioris* **n. n.** for *sericeus* Lec. nec Eschsch., nec Costa) p. 349; *guernei* Rég. (= *guerini* Zimm., *err. scrips.*); *multiguttatus* Rég. (= *multipunctatus* Zimm., *err. scrips.*); *ferrugineus* Steph., *obsoletus* Aubé discussed; *teres* Sharp discussed p. 350; *humilis* Klug (= *antidotus* Sharp) p. 351, BALFOUR-BROWNE t.c.—*H.* (*Oreodytes*) *productotruncatus* **sp. n.** Br. Columbia p. 46, HATCH Bull. Brooklyn ent. Soc. **39.**

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Ilybius quadriguttatus Lac. (=*obscurus* Marsh. nec Panz.) p. 352, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

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Oreodytes alpinus Payk. (=*bidentatus* Gyll., *borealis* Geitl., *borealis* Gyll.); *davisii* Curt. (=*alpinus* auct., *borealis* auct., *septentrionalis* Heer) p. 191, BALFOUR-BROWNE Ent. mon. Mag. **80.**

Platynectes kashmiranus **n. n.** for *lineatus* Redt. nec Guér.; *monostigma* Hope (= *Agabus latissimus* Clark) p. 352, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

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Rantus Steph. and *Rhantus* auct. spelling discussed p. 143, BRINCK Förh. K. fysiogr. Sällsk. Lund **13.**—*R. vitiensis* **sp. n.** Fiji p. 99, BALFOUR-BROWNE Proc. R. ent. Soc. Lond. (B) **13.**—*R. aberratus* G. & H. (= *adspersus* F. nec Panz., nec Ill.) p. 353; *novae-caledoniae* **n. n.** for *marmoratus* Perroud nec Hope; *virosus* **n. n.** for *flavicollis* Rég. nec Eschsch.; *frontalis* Marsh. (= *notatus* F. nec Bergstr.) p. 354, BALFOUR-BROWNE Ann. Mag. n. H. (11) **11.**

Sandracottus mixtus Blanch. (= *fasciatus* F. nec Deg.); *wehnckei* **n. n.** for *maculatus* Wehn. nec Lec. p. 355, BALFOUR-BROWNE t.c.

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Stictonectes **n. n.** for *Stictonotus* Zimm. nec Förster, type (*Dytiscus*) *lepidus* Ol. p. 139, BRINCK Förh. K. fysiogr. Sällsk. Lund **13.**

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Gyretes ochsi **sp. n.** Colombia p. 19 fig., BRINCK Opusc. ent. Lund **9.**

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Algon excellens **sp. n.** Assam p. 13, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

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Astenus (s. str.) *villiersi* p. 56, (s. str.) *barbarae* p. 57, **spp. n.** Morocco fig., KOCH Ann. Soc. ent. Fr. **110** 1941.—*A. gracilis* Payk. (= *angustatus* Payk. nec Geoffr.) p. 160, MÉQUIGNON Bull. Soc. ent. Fr. **48** (1943).

Atheta (s. str.) *madecassa* Madagascar p. 319, *yemenensis* Aden p. 320, **spp. n.**, CAMERON Ann. Mag. n. H. (11) **11.**—*A.* (*Acrotona*) *peregrinoides* p. 158, (*Acrotona*) *pseudolaticollis* p. 159, **spp. n.** Hong Kong, CAMERON Ent. mon. Mag. **80.**—*A.* (*Paraloconota*) *musicola* **var. n.** *fuscata*; (*Aloconota*) *inaequalis*, (*Metaxya*) *medialis* p. 104, (*M.*) *congruens*, (*Ousipalia*) *pseudocaesula*, (*A.*) *championi*, (*Dimetrota*) *deprava*, (*Datomicra*) *pauxilla* p. 105, (*D.*) *pseudosordidula*, (*Acrotona*) *ghanii*, (*A.*) *orphanella* p. 106, (*A.*) *rufolucida* p. 107, **spp. n.** India, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**—*A.* (*Ceritaxa*) *gravicornis* **sp. n.** Morocco p. 69, KOCH Ann. Soc. ent. Fr. **110** 1941.—*A.* subgenn. and spp. discussed pp. 3–38; (*Metaxya*) *marina* M. & R. (= (*M.*) *poppiusi* Fenyes) p. 4; (*M.*) *concolor* Epph. (= (*M.*) *pallidicollis* Bernh.) p. 5; (*M.*) *gelida* Sahlb. (=(*M.*) *nordenskiöldi* Brundin) p. 11; (*Panalota*) *kamtschatica* Kamchatka p. 21, (*P.*) *jessoënsis* Hokkaido p. 22 **spp. n.** figs., BRUNDIN Acta Univ. lundensis (N.F.) **54** no. 4.

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Chilodera **gen. n.** p. 619, *falklandica* **sp. n.** Falkland Is. p. 620, CAMERON t.c.

Conosoma nigerrimum **sp. n.** India p. 49, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Dolicaon gridellii p. 59, *jarrigei* p. 60, **spp. n.** Morocco, KOCH Ann. Soc. ent. Fr. **110** 1941.

Exacrotona **gen. n.**, *rufoflava* **sp. n.** China p. 159, CAMERON Ent. mon. Mag. **80.**

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Leptacinus pusillus Steph. (= *linearis* Grav.); *sulcifrons* Steph. (= *intermedius* Donisth.) p. 159, MÉQUIGNON Bull. Soc. ent. Fr. **48** (1943).

Medon (s. str.) *oculatus* Madagascar, (*Hypomedon*) *marinus* Mauritius, **spp. n.** p. 313, CAMERON Ann. Mag. n. H. (11) **11.**

Megarthrus ogloblini **sp. n.** Misiones p. 111 figs., BRUCH Notas Mus. La Plata **5** (Zool.) 1940.

Mesoaesthetus **gen. n.** p. 68, *wilsoni* **sp. n.** S. Australia p. 69, CAMERON Ann. Mag. n. H. (11) **11.**

Mimodictyon **gen. n.**, *indicola* **sp. n.** India p. 15, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Myllaena kashmirica **sp. n.** India p. 51, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

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Ontholestes assamensis **sp. n.** Assam p. 11, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Oxypoda sponsa **sp. n.** Algeria p. 29, fig., NORMAND Bull. Soc. ent. Fr. **46** 1941.

Oxytelopsis gardneri **sp. n.** India p. 58 fig., PAULIAN Bull. Soc. ent. Fr. **45** 1940.

Paederus grandipennis **subsp. n.** *megacephalus* Morocco p. 56, KOCH Ann. Soc. ent. Fr. **110** 1941.

Parabrachida persimilis **sp. n.** Cochin China p. 158, CAMERON Ent. mon. Mag. **80.**

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Philomyceta **gen. n.**, *caeruleipennis* (type) p. 12, *affinis* p. 13, **spp. n.** Darjeeling, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Philonthus (s. str.) *atratus* **subsp. n.** *megatlasicus* Morocco p. 61 figs., KOCH Ann. Soc. ent. Fr. **110** 1941.

Placusa rufoflava **sp. n.** India p. 51, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Pronomaea insularis **sp. n.** Zanzibar p. 317, CAMERON Ann. Mag. n. H. (11) **11.**

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Quedius (s. str.) *kashmirensis*, (*Microsaurus*) *flavocaudatus* p. 13, (*Sauridus*) *deceptor*, (*Raphirus*) *decipiens*, (*R.*) *heterogaster* p. 14, **spp. n.** India, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**—*Q. subfuliginosus* **sp. n.** England p. 289 figs., BRITTEN Northw. Nat. **18.**—*Q.* (*Raphirus*) *pauliani* **sp. n.** Morocco; (*R.*) *fumatus*, *ustus* characters p. 66 figs., KOCH Ann. Soc. ent. Fr. **110** 1941.

Schistoglossa spp. discussed pp. 7–11; *aubéi* Bris. (= *approximans* Epph.); key p. 10 figs., BRUNDIN Acta Univ. lundensis (N.F.) **54** no. 4.

Staphylinus (*Abemus*) *marginatus* Bengal, (*Ocypus*) *bicolor* Punjab, **spp. n.** p. 11, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Stenus palustris **subsp. n.** *bourveaui* France p. 55, JARRIGE Bull. Soc. ent. Fr. **45** 1940.

Tachinus limbicollis, *ornatus* **spp. n.** India p. 49, HARDY Proc. R. ent. Soc. Lond. (B) **13.**

Tachyporus cameroni **sp. n.** Ireland p. 67, DONISTHORPE Ent. mon. Mag. **80.**—*T.* key to British spp. p. 16; *scitulus* Er. a distinct sp.; *tersus* Er. (= *lateralis* Steph.) p. 17, CAMERON Ent. mon. Mag. **80.**—*T. somaliensis* **sp. n.** Somaliland p. 316, CAMERON Ann. Mag. n. H. (11) **11.**

Tachyusa (s. str.) *madecassa* **sp. n.** Madagascar p. 319, CAMERON t.c.

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Thamiaraea adjacens, *inconspicua*, *parvula* **spp. n.** India p. 107, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

Thinocharis orientalis **sp. n.** S. China p. 158, CAMERON Ent. mon. Mag. **80.**

Trichophya kashmirica, *andrewesi* **spp. n.** India p. 14, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

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Xantholinus elianae p. 47, *colasi* p. 48, **spp. n.** France, JARRIGE Bull. Soc. ent. Fr. **46** 1941.—*X. miguelensis* **sp. n.** Azores p. 9, MÉQUIGNON Bull. Soc. ent. Fr. **47** 1942.

Zyras (*Glossacantha*) *deceptivus*, (*Z.*) *indicus* India, (*Z.*) *nitens* Selangor, **spp. n.** p. 108, CAMERON Proc. R. ent. Soc. Lond. (B) **13.**

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Brachygluta stylophora **sp. n.** Tunisia p. 28, NORMAND Bull. Soc. ent. Fr. **46** 1941.

Bythinus puncticollis abnormal female p. 66 figs., PEARCE Proc. R. ent. Soc. Lond. (A) **19.**

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Revision of Nearctic Silphini and Nicrophorini based on female genitalia, ARNETT J. N.Y. ent. Soc. **52** pp. 1–24 4 pls.

Silphidae of Parc Nat. Albert, Belg. Congo, JANSSENS Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943 pp. 15–18.

Nicrophorus melsheimeri Kby., *nigritus* Mann., *hecate* Bland. distinct spp. p. 15, ARNETT J. N.Y. ent. Soc. **52.**

Silpha surinamensis F. a form of *littoralis* L. p. 13, ARNETT t.c.

Thanatophilus (*Chalcosilpha*) *micans* further description p. 17, JANSSENS Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943.

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Scaphidium quadrimaculatum larva p. 147 figs., PAULIAN Bull. Soc. ent. Fr. **48** (1943).

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Carcinops pumilio Er. 1834 (= *quatuordecimstriata* Steph. (date 1835 **non** 1832)) p. 160, MÉQUIGNON Bull. Soc. ent. Fr. **48** (1943).

Geomysaprinus rugosifrons Fall from *Saprinus* p. 118, Ross Ent. News **55**.

Hister distinctus morphology pp. 83–84 figs., DE SAINT-ALBIN Bull. Soc. ent. Fr. **46** 1941.—*H. ignobilis* **var. n.** *schmidtianus* France p. 151, DE SAINT-ALBIN op. cit. **47** 1942.—*H. ignobilis* p. 21, (*Pachylister*) *inaequalis* p. 22 larvae figs., DE SAINT-ALBIN op. cit. **48** 1943.

Onthophilus kirni **sp. n.** Texas p. 115, Ross Ent. News **55**.

Paromalus flavicornis larva p. 23 figs., DE SAINT-ALBIN Bull. Soc. ent. Fr. **48** 1943.

Reninus breyeri **sp. n.** Argentina p. 315 figs., BRUCH Notas Mus. La Plata **5** (Zool.) 1940.

Saprinus rugosifrons see *Geomysaprinus*.

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Penolanguria key to African spp. p. 19; *wittei* **sp. n.** Belg. Congo p. 18 fig., VILLIERS Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 36 1942.

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Adonia variegata early stages pp. 52–54 figs., KAPUR Indian J. Ent. **4** 1942.

Alesia striata **ab. n.** *flavocincta* p. 187; *trilineatoides* **sp. n.** p. 188 Belg. Congo, MADER Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 34 1941.

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Solanophila revision pp. 9–102; *vulpecula* Reiche a good sp.; *jejuna* Ws. ab. of *vulpecula* not of *nigritarsis* p. 19; *tibialis* **subsp. n.** *ugandica* p. 20; 22-*maculata* p. 22, *aereipennis* p. 27, *mirabilis* p. 28, *witteiana* p. 35, *quadriguttula, paradoxa* p. 36, 14-*punctata* p. 38, 13-*punctata* p. 40, *eremita* p. 46, *flavoquadrimaculata* p. 52, *korschefskyi* p. 56, *fascifera* p. 58 (with **abb. n.** *bifascia* p. 59, *latefascia* p. 60), *latesellata* p. 61, *jucunda* p. 63 (with **abb. n.** *crucifera* p. 65, *mediocloustra*, 14-*plagiata* p. 66), *fraudulenta* p. 72 (with **abb. n.** 14-*guttata, crux, nigripennis, nigricollis*), *fallaciosa* p. 73 (with **ab. n.** *fulvithorax* Tanganyika), 10-*plagiata* p. 75, *mirifica* p. 76, *graueri* (with **ab. n.** *transversa*) p. 77, 15-*punctata* p. 78, *bisdecempunctata* p. 80 (with **var. n.** *pallidipennis* p. 83 and with **abb. n.** *maculithorax, confluens, inornaticollis*), *bisdecemsignata* p. 85, *aenigma* p. 96, **spp. n.**; *karisimbica* **ab. n.** *fulvicollis* p. 44; 20-*punctata* **subsp. n.** *iocosa* p. 80; *sahlbergi* **ab. n.** *maculithorax* p. 89; *gyldenstolpei* **ab. n.** *covina* p. 94; *vulcanica* **ab. n.** *atripennis* p. 95 Belg. Congo; *kaffaensis* **ab. n.** *ochripennis* Abyssinia p. 50; *dissepta* Ws. a good sp.; *d.* **abb. n.** *nigromaculata, obscuricollis* Cameroons p. 71; *sjöstedti* Ws. a good sp. p. 42; *quadrioculata* Kolbe (= *tetracycla major* Ws.) p. 51; *nympha* Arr. p. 30, *amorpha* Arr. p. 46, *adjuncta* Cr. p. 102 from *Epilachna* figs., MADER Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 34 1941.—*S. apicalis, auroguttata* see *Epilachna*.

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Acmaeodera flavipennis **abb. n.** *brunneicostata*, *dispersemaculata* Sinai p. 145 ; *nivifera* **subsp. n.** *mochii* Egypt p. 151, LOTTE Bull. Soc. Fouad 1er Ent. **27** 1943.

Agrilus male genitalia of some spp. figured pp. 75–83 ; *palmerleei* p. 76, *amelanchieri* p. 80 **spp. n.** U.S.A. figs., KNULL Ann. ent. Soc. Amer. **37**.—*A. angustulus* **var. n.** *latisternum* p. 160 ; *viridis* **ab. n.** *androgynus* p. 165 ; *aurichalceus* **ab. n.** *acutangulus* p. 167 France figs., THÉRY Faune de France **41** 1942.—*A. pratensis* Ratz. (= *roberti* Chevr. (date 1838 non 1837)) p. 160. MÉQUIGNON Bull. Soc. ent. Fr. **48** (1943).—*A.* key to spp. in Trinidad : *cibarius* p. 399, *animatus* p. 401, *adamsoni* p. 402, *esculentus* p. 403, *hostia* p. 405, *captivus* p. 406, *consumptoris* p. 407, *victima* p. 408, **spp. n.** Trinidad, FISHER Proc. U.S. nat. Mus. **95** no. 3183.

Anthaxomorphus coomani Tonkin p. 120, *maindroni* Ternate, Moluccas p. 121, **spp. n.** figs., THÉRY Bull. Soc. ent. Fr. **48** 1943.

Belgaumia horni Malacca p. 91, *harmandi* Cochin-China p. 92, **spp. n.** figs., THÉRY op. cit. **46** 1941.

Capnodis list of spp. in Palestine : eggs p. 236, RIVNAY Bull. ent. Res. **35**.

Chrysobothris cornigera **sp. n.** Trinidad p. 397, FISHER Proc. U.S. nat. Mus. **95** no. 3183.

Dicerca querci **subsp. n.** *cajonensis* California p. 90 fig., KNULL Ohio J. Sci. **44**.

Habroloma viridipennis **sp. n.** Turkestan p. 61 fig., THÉRY Bull. Soc. ent. Fr. **45** 1940.

Meliboeoides **gen. n.** for *Meliboeus amethystinus* Ol. p. 120 fig., THÉRY Faune de France **41** 1942.

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Phaenops cyanea **subsp. n.** *lavagnei* France p. 73, THÉRY Faune de France **41** 1942.

Psiloptera johanni **sp. n.** Brazil p. **59** fig., LOTTE Bull. Soc. ent. Fr. **45** 1940.

Taphrocerus huachucanus **sp. n.** Arizona p. 90 ; *nicolayi*, *howardi*, *schaefferi* notes p. 91 figs., KNULL Ohio J. Sci. **44**.

Trachys scrobiculatus Kies. (= *menthae* Bedel); *troglodytes* Gyll. (= *aeneus* Mann.) discussed p. 161, MÉQUIGNON Bull. Soc. ent. Fr. **48** (1943).

Yamina dumonti **sp. n.** (with **var. n.** *nigripennis*) S. Tunisia p. 132 fig., THÉRY Bull. Soc. ent. Fr. **47** 1942.

TENEBRIONIDAE (BORIDAE, RHYSOPAUSSIDAE, TRETOTHORACIDAE).

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Dividiopsa **gen. n.** for *Gnophota angolensis* Har. p. 158 figs., KOCH Mitt. schweiz. ent. Ges. **19**.

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Mateuina **gen. n.** (Opatrini) p. 22, *kaszabi* **sp. n.** Spanish Sahara p. 24 fig., ESPAÑOL COLL Eos **20**.

Microdendarus **gen. n.** for *Dendarus schusteri* Esp. (type) p. 83, *depressus* Reitt. p. 91, DE LA ESCALERA Eos **20**.—See *Reitterellus*.

Moralesia **gen. n.** (Opatrini) p. 18, *longepilosa* **sp. n.** Spanish Sahara p. 19 fig., ESPAÑOL COLL Eos **20**.

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Pyrota vittigera colour variations pp. 229–232 figs., ARAUJO Rev. brasil. Biol. 4.

Zonabris rubronotata p. 77, *adrarensis* p. 78, spp. n. Centr. Sahara, PIC Bull. Soc. ent. Fr. 47 1942.

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Lamellicornia.

Polymorphism in giant beetles, ARROW Proc. zool. Soc. Lond. (A) 113 (1943) pp. 113–116, 1 pl.

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Dorcus mexicanus sp. n. Mexico p. 45 figs., BENESH Ent. News 55.

Sclerostomus tucumanus re-description p. 197, BRUCH Notas Mus. La Plata 4 (Zool.) 1939.

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Caccobius chujôi sp. n. Formosa p. 58 PAULIAN Bull. Soc. ent. Fr. 47 1942.

Canthon revision of Mexican spp. pp. 301–313 figs., ISLAS An. Inst. Biol. Mexico 13 1942.—*C. principalis* var. n. *lichyi* Argentina p. 189, MARTÍNEZ Rev. Soc. ent. argent. 12.

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Phanaeus revision of Mexican spp pp. 313–330 figs., ISLAS An. Inst. Biol. Mexico **13** 1942.—*P.* (*Megaphanaeus*) key to spp. p. 185; *vicinus* **sp. n.** Bolivia p. 187 (with **var. n.** *argentinus* Argentina p. 188) figs., MARTINEZ Rev. Soc. ent. argent. **12**.

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Pseudosaproecius **gen. n.** for *Onthophagus comatus* d'Orb. in pp. 181–183, BALTHASAR Arb. morph. taxon. ent. Berl. **8** 1941 [not seen].—*P. validicornis* Qued., *hirsutus* Bouc. p. 40, *furcimargo* d'Orb., *turneri* Bouc. p. 44 from *Stiptopodius*, JANSSENS Expl. Parc nat. Albert. Miss. de Witte (1933–35) fasc. 38 1942.

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APHODIIDAE.

Revision of African Aphodiinae (key to Eupariina p. 108), PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942 143 pp. 2 maps 23 pls. 7 figs.

Acrossus Muls. raised to gen. p. 63, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Aphodiellus Schmidt raised to gen. p. 83, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Arrowiellus Balt. raised to gen. p. 84, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Doaphius **gen. n.**, *rufopolitus* **sp. n.** Ital. Somaliland in pp. 164–183, BALTHASAR Mitt. münchn. ent. Ges. **31** 1941 [not seen].

Emadiellus Schmidt raised to gen. p. 74, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Euparia ambrymensis **sp. n.** N. Hebrides p. 78, PAULIAN Ann. Soc. ent. Fr. **110** 1941.

Giaraphodius **gen. n.**, *somalicus* **sp. n.** Somaliland pp. 150–151, BALTHASAR Atti Soc. ital. Sci. nat. **80** 1941 [not seen].

Gonaphodiellus Schmidt raised to gen. p. 73, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Rhyssemodes orientalis larva p. 130 figs., PAULIAN Bull. Soc. ent. Fr. **47** 1942.

Rhyssemus schatzmayri sp. n. Somaliland p. 152 fig., BALTHASAR Atti Soc. ital. Sci. nat. **80** 1941 [not seen].

Saprosites key to African spp. p. 113; *lepersonnei* **sp. n.** Congo p. 114 figs., PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

Schmidtaphodius **subgen. n.** (type *hepaticolor* Qued.) see *Trichaphodius*.

Tetraclipeoides Schmidt raised to gen. p. 45, PAULIAN Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 35 1942.

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Volinus hucklesbyi **sp. n.** Palestine p. 60, PAULIAN Bull. Soc. ent. Fr. **47** 1942.

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Bolboceras princeps Kolbe (= *abyssinicum* Müll.); *validum* Klug (= *rollii* Müll.) p. 141, PAULIAN Bull. Soc. ent. Fr. **47** 1942.—*B. monticola* further description p. 46, JANSSENS Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943.

Eucanthus lazarus **var. n.** *alutaceus* U.S.A. p. 30, CARTWRIGHT Ann. ent. Soc. Amer. **37**.

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Clemora smithi notes p. 102, VINSON Rev. agric. Ile Maurice **23**.

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Hilyotrogus Fairm. (= *Melichrus* Brsk.) characters; *holosericeus* Redt. (= *rufoflavus* Moser, *Holotrichia stridulans* Sharp); *formosana* Niij. & Kinosh. from *Heptophylla* p. 633, ARROW Ann. Mag. n. H. (11) **11**.

Holomelia Brsk. characters; *calva* p. 643, *anomala* p. 644 **spp. n.** Malay Peninsula, ARROW t.c.

Holotrichia Hope (= *Lachnosterna* Hope, *Ancylonycha* Blanch., *Phyllophaga* Harr.) status discussed p. 1, notes on allied genn. pp. 633–635; *cochinchina* Nonfr. (= *intermedia* Brsk.); *moseri* **n. n.** for *cochinchinae* Brsk. nec Nonfr.; *bilobiceps* **n. n.** for *bilobata* Arr. nec Moser; *bidentata* Burm. ♀ (= *Lachnosterna convexa* Sharp ♂) p. 635; *nilgiria* S. India p. 636, *coxalis* Borneo, Sarawak p. 637, *kaligoensis*, *vernicata* Java p. 638 **spp. n.**, ARROW t.c.—*H. stridulans* see *Hilyotrogus holosericeus*.

Lachnosterna (*Phyllophaga*) of Georgia 32 pp., FATTIG Emory Univ. Mus. Bull. no. 2.—*L.* (*P.*) *hoogstraali* p. 21, *minutissima* p. 22, *tancitara* p. 23, *certanca* p. 25, *haagi* p. 26, *tridilonycha* p. 27, **spp. n.**; *cavatus* **subsp. n.** *michoacana* p. 24 Mexico; *rorulenta* revision of group pp. 129–142; *hondura* Costa Rica p. 132, *baneta* Guatemala p. 133, *caraga* Nicaragua p. 134, *acapulca*, *temora* Mexico p. 135, **spp. n.** figs., SAYLOR Proc. biol. Soc. Wash. **56**

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Megistophylla Burm. (= *Hecatomnus* Fairm.) p. 633, ARROW Ann. Mag. n. H. (11) **11**.

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Metabolus see *Pseudosymmachia*.

Pentelia Brsk. characters p. 634, key to spp.; *densa* **sp. n.** N. Borneo p. 642. ARROW Ann. Mag. n. H. (11) **11**.

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Rhizotrogus niponicus see *Pseudosymmachia impressifrons*.

Schizonycha key to Asiatic spp.; *nigrofusca* **subsp. n.** *arabica* p. 196; *pygidialis* p. 197, *yemenensis* p. 198 S. Arabia, *decipiens* India (? Assam) p. 199 **spp. n.** figs., ARROW Ann. Mag. n. H. (11) **11**.

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Asporus **gen. n.** (Eremninae), *setarius* **sp. n.** Tonkin, Hong Kong p. 441, MARSHALL Ann. Mag. n. H. (11) **11**.

Asynetus **gen. n.** (Eremninae) p. 93, *furvus* **sp. n.** Burma p. 94, MARSHALL t.c.

Atenistes attenuatus **var. n.** *obidensis* Brazil p. 320, MONTE Rev. Ent. Rio de J. **15**.

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Bolivianus Hust. transferred to Leptopinae from Eremninae p. 73, MARSHALL Ann. Mag. n. H. (11) **11**.

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Catamonus laticollis **sp. n.** Tanganyika p. 342, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Catoptes transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Celeléś Schoenh. (= *Everges* Schoenh., *Hoplorrhinus* Chevr.) p. 338, list of spp. p. 343; *malleri* p. 344, *langei* p. 345, *pallidus* p. 346, *decolor* p. 347, *braga* Brazil, *trith inacis* Argentina p. 348 **spp. n.**, BONDAR Rev. Ent. Rio de J. **14** 1943.

Centemerus see *Phytotribus*.

Chelotonyx list of spp. p. 296, MONTE Rev. brasil. Biol. **4**.

Chelyophyes **gen. n.** (Otiorrhynchinae) p. 46, *hemisphaericus* **sp. n.** Ivory Coast p. 48 fig., MARSHALL Bull. ent. Res. **35**.

Cnaphoscapus **gen. n.** (Eremninae) p. 451, *bisignatus* **sp. n.** Perak; *decoratus* Fst. (= *nigroclavatus* Aur., *patricius* Fst.) from *Cyphicerus* p. 452, MARSHALL Ann. Mag. n. H. (11) **11**.

Cnodostethus **gen. n.** (Eremninae), *seminudus* **sp. n.** Java p. 92, MARSHALL t.c.

Conotrachelus cecropiae p. 193, *fiedleri* p. 195, *guabirobae*, *ubacahy* p. 196, *copaiferae* p. 197, *murtinus* p. 198, *anonae* p. 200, *guapevae* p. 201, *massarandubae* p. 202, *oiti* p. 203, **spp. n.** Brazil, BONDAR Rev. Ent. Rio de J. **15**.—*C.* keys to groups pp. 2, 13, 26, 43, 59; *aequalis* p. 4, *taciturnus* p. 5, *armillatus* p. 39 Montevideo, *confluens* p. 5, *dimidiatipes* p. 6, *flabelliferus* p. 7, *integellus*, *arcuatirostris* p. 9, *instabilis* p. 10, *insons*, *terminalis* p. 11, *gibberiferus* p. 12, *acurostris* p. 13, *humeridens* p. 15, *spinipennis* p. 16, *gracilipes*, *despoliatus* p. 17, *omoplatus*, *aurantiacus* p. 18, *setulosus* p. 19, *alboposticatus* p. 20, *flavotessellatus* p. 21, *granosicollis* p. 23, *variolosus*, *furvus* p. 25, *albotuberorus* p. 29, *testudineus* p. 30, *obscurogriseus*, *albidulus* p. 32, *specularis* p. 33, *leucogrammus* p. 34, *sabulosus* p. 33, *fur* p. 41, *brunneolus* p. 42, *cinereovestitus*, *multidentatus* p. 46, *paulanus* p. 47, *planicollis* p. 48, *diversipes* p. 49, *glandulipennis* p. 50,

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Coptomerus see *Ampagia*.

Corigetus trapezicollis (*armiger*) see *Platymycterus*; *claviger* see *Taurostomus*; *trepidus*, *sellatocollis* see *Hercomycterus*; *exquisitus*, *setulifer*, *crassicornis* see *Hypsedaphus*; *nobilis* see *Phrixopogon*; *bidentulus* see *Hilaus*; *instabilis* see *Hamartus*; *decorsei*, *rubripes*, *africanus*, *humilis*, *solskyi* see *Myllocerinus*; *saturatevirens*, *papuanus*, *albizziae*, *enganensis*, *chrysideus* see *Drymophoetus*.

Corimalia pallidulus Grav. from *Nanophyes* p. 10, BROWN Canad. Ent. **76**.

Cybebus gibbipennis see *Apotapion*.

Cylindromus Aur. transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Cylindrorrhinus fortunai **sp. n.** Argentina p. 113 figs., BRUCH Notas Mus. La Plata **5** (Zool.) 1940.

Cyphicerinus pannosus Mshl. from *Cyrtepistomus* p. 93, MARSHALL Ann. Mag. n. H. (11) **11**.

Cyphicerus necopinus Fst. from *Cyrtepistomus* p. 96, MARSHALL t.c.—*C. decoratus* (=*nigroclavatus*, *patricius*) see *Cnaphoscapus*; *schönfeldti*, *bohemani*, *farinosus* see *Hackeria*; *indagator* see *Diatropus*; *deplanatus* see *Thlipsomerus*.

Cyrtepistomus necopinus see *Cyphicerus*; *subcosticollis*, *glebosus* see *Thlipsomerus*: *pannosus* see *Cyphicerinus*.

Diaecoderus acuticollis Fst., *chyluanus* Mshl., *densepunctatus* Aur., *otiorrhynchoides* Hust., *sobrinus* Mshl., *trapezicollis* Fst., *villosus* Hust. from *Systates* pp. 314, 317; *ater* Mshl., *cognatus* Mshl. from *Isaniris* p. 318, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Diatmetus sparsisquamis **sp. n.** Kenya p. 309, MARSHALL t.c. [See *Hypertmetus* Z.R. **80** 1943 p. 133.]

Diatropus **gen. n.** for *Cyphicerus indagator* Fst. p. 443, MARSHALL Ann. Mag. n. H. (11) **11**.

Douttia **gen. n.** (Cryptorrhynchinae) p. 193, *bicolor* **sp. n.** New Hebrides p. 194 figs., ZIMMERMAN Ann. ent. Soc. Amer. **37**.

Drouetius **subgen. n.** (type *azoricus* Drouet) see *Laparocerus*.

Drymophoetus **gen. n.** for *Corigetus saturatevirens* Boh. (type), *C. papuanus* Fst., *albizziae* Mshl., *enganensis* Mshl., *chrysideus* Pasc. p. 455, MARSHALL Ann. Mag. n. H. (11) **11**.

Epeigorrhinus constricta see *Lecanophora*.

Epixynus **gen. n.** p. 90 (Eremninae), *calvus* **sp. n.** India p. 91, MARSHALL Ann. Mag. n. H. (11) **11**.

Erirrhinoides mourei **sp. n.** Brazil p. 350, BONDAR Rev. Ent. Rio de J. **14** 1943.

Everges see *Celetes*.

Farsomias **gen. n.** (Brachyderinae), *cyanosparsus* **sp. n.** Persia p. 138, MARSHALL Ent. mon. Mag. **80**.

Faustinus cubae Boh. discussed pp. 293–295 fig., MONTE Rev. brasil. Biol. **4**.

Hackeria Lea transferred to Eremninae from Otiorrhynchinae; *schönfeldti* Fst., *bohemani* Reitt., *farinosus* Fst. from *Cyphicerus* p. 458, MARSHALL Ann. Mag. n. H. (11) **11**.

Hamartus **gen. n.** for *Corigetus instabilis* Mshl. p. 439, MARSHALL t.c.

Hammatostylus mycterius **sp. n.** Brazil p. 318, MONTE Rev. Ent. Rio de J. **15**.

Haplocorynus deceptor **sp. n.** Uganda p. 353, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Hemerus **gen. n.** (Eremninae) p. 458, *virens* **sp. n.** India p. 459, MARSHALL Ann. Mag. n. H. (11) **11**.

Hercomycterus **gen. n.** for *Corigetus trepidus* Fst. (type), *C. sellatocollis* Fst. p. 86, MARSHALL t.c.

Heterostylus gedyei **sp. n.** Kenya p. 308, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Hilaus **gen. n.** for *Corigetus bidentulus* Fst. p. 97, MARSHALL Ann. Mag. n. H. (11) **11**.

Hoplorrhinus see *Celetes*.

Hulpes further characters p. 373 ; *bicolor* **sp. n.** Brazil p. 374, BONDAR Rev. Ent. Rio de J. **14** 1943.

Hylobius transversovittatus characters p. 287, ASHE Ent. mon. Mag. **80**.

Hypenephorus **gen. n.** for *Peltotrachelus albus* Pasc. p. 457, MARSHALL Ann. Mag. n. H. (11) **11**.

Hypsedaphus **gen. n.** for *Corigetus exquisitus* Fst. (type) p. 87, *C. setulifer* Reitt., *C. crassicornis* Desbr. p. 88, MARSHALL t.c.

Ilamania **gen. n.** (Alophinae), *tocquevillei* **sp. n.** Hoggar p. 103 fig., DE PEYERIMHOFF Bull. Soc. ent. Fr. **45** (1940) 1941.

Inocatoptes transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Inophloeus transferred to Leptopinae from Eremninae p. 74, MARSHALL t.c.

Isanates **gen. n.** for *Isaniris gerstaeckeri* Fst. (type) and 16 other spp. ; and for *Systates armiger* Klb., *bispinosus* Hust., *irregularis* Fst. p. 335 ; *vansomereni* **sp. n.** Kenya p. 336, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Isaniris ater, cognatus see *Diaecoderus* ; *gerstaeckeri* and 16 other spp. see *Isanates*.

Ischnobrotus see *Anaplesius*.

Laparocerus (*Drouetius* **subgen. n.** p. 10), MÉQUIGNON Bull. Soc. ent. Fr. **47** 1942.

Larinus biggsi **sp. n.** Persia p. 139, MARSHALL Ent. mon. Mag. **80**.

Leacis vitiensis further description p. 165 figs., ZIMMERMAN Occ. Pap. Bishop Mus. **17** 1943.

Lecanophora constricta Hust. from *Epeigorrhinus* ; *neavei* **sp. n.** Kenya p. 338, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Leptostethus Waterh. transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Liophloeus tesselatus **var. n.** *daillei* France p. 75, TEMPÈRE Bull. Soc. ent. Fr. **45** 1940.

Lissorhoptrus bosqi **sp. n.** Argentina p. 307 figs., KUSCHEL Notas Mus. La Plata **8** (Zool.) 1943.

Ludovix albipennis **sp. n.** Brazil p. 319, MONTE Rev. Ent. Rio de J. **15**.

Malacobius capucinus cocoon p. 185 ; *lineatus* **sp. n.** Brazil p. 187 figs., MONTE Rev. brasil. Biol. **4**.

Mandalotus Er. transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Mesoleurus **gen. n.** for *Systates habenatus* Mshl. (type) p. 318, *albidovittatus* Fairm., *dentipes* Mshl., *katonaensis* Hust., *strophosomoides* Hust., *suturalis* Hust. p. 314, key p. 318 ; *limbatus* N.W. Rhodesia p. 320, *direptus* p. 321, *cyladoides* p. 324, *plagiatus, cinctus* p. 325 Tanganyika, *costatipes* N.E. Rhodesia p. 322, *laminifer* Nyasaland p. 323, **spp. n.**, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

Metamasius sericeus morphology p. 33, early stages p. 35 figs., LEPESME & PAULIAN Bull. Soc. ent. Fr. **46** 1941.

Microstrates hatschbachi **sp. n.** Brazil p. 370, BONDAR Rev. Ent. Rio de J. **14** 1943.

Mitophorus pruinosus Gerst. (=*Systates lesnei* Mshl.) p. 334, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.—*M. globosus, humerosus* see *Systates* ; *gravidus, largus, pilosus* see *Phoromitus* ; *acerbus, aeneipennis, inflatipennis, metallicus, rugosicollis, semiaeneus, sulciscapus, vittatus* see *Nematocerus*.

Myllocerinus heydeni Faust designated type ; *arabicus* Boh. from *Myllocerus* ; *decorsei* Hust., *rubripes* Hust., *africanus* Hust., *humilis* Gestro, *solskyi* Faust from *Corigetus* p. 447, MARSHALL Ann. Mag. n. H. (11) **11**.

Myllocerus laetivirens early stages p. 104, BOSE Indian J. Ent. **5**.—*M. mystacinus* p. 337, *athianus* p. 347 Kenya, *horridulus* Tanganyika p. 348

spp. n., MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.—*M. incurvus, bovilli* see *Syrphax*; *arabicus* see *Myllocerinus*.

Mythecops aerea, kermana p. 136, *scabra* p. 137 **spp. n.** Persia; key to spp. p. 137, MARSHALL Ent. mon. Mag. **80**.

Nanophyes fallax Rey (= *mariei* Hoffm.) p. 20, HUSTACHE Bull. Soc. linn. Lyon (N.S.) **9** 1940.—*N. mariei* Hoffm. a valid sp. p. 70, HOFFMANN Bull. Soc. ent. Fr. **46** 1941.—*N. canadensis* **sp. n.** Canada p. 10, BROWN Canad. Ent. **76**.—*N. analis* **sp. n.** Kenya p. 349, MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.—*N. pallidulus* see *Corimalia*.

Nematocerus Reiche (= *Platyscapus* Hust.) *metallicus* Reiche, *acerbus* Fst., *aeneipennis* Gerst. (= *inflatus* Gerst., *longirostris* Hust.), *sulciscapus* Aur., *vittatus* Pasc. p. 330, *semiaeneus* Gerst., *rugosicollis* Gestro, *inflatipennis* Hust from *Mitophorus*; *angustirostris* Aur. (= *müller*i Hust.) and 32 other spp. from *Systates*; *aereus* **n. n.** for *metallicus* Gerst. nec Reiche; *subcyaneus* p. 331, *rotundus* p. 345 Kenya, *sericeus* S. Abyssinia p. 332, *distortipes* Uganda p. 333, **spp. n.**, MARSHALL J. E. Afr. Ug. **n.** H. Soc. **17**.

Neocampyloscelus **gen. n.** (Campyloscelinae), *benitoensis* **sp. n.** Fr. Congo p. 131, HUSTACHE Ann. Soc. ent. Fr. **110** 1941.

Neoevas transferred to Leptopinae from Eremninae p. 74, MARSHALL Ann. Mag. n. H. (11) **11**.

Nesogenocis cucullus further description p. 160; *maculosus* **sp. n.** Fiji p. 162 figs., ZIMMERMAN Occ. Pap. Bishop Mus. **17** 1943.

Omophorus boxi **sp. n.** Kenya p. 350; *indispositus* Boh. (= *occidentalis* Fairm.); *cupreus* Pasc. (= *nicodi* Hust.) p. 351 figs., MARSHALL J. E. Afr. Ug. n. H. Soc. **17**.

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Megachile anisitsi Schr. (= *intergradus* Mitch.) p. 169; *rodriguesi* p. 173, *opsiphanes* p. 176, *pseudanthidioides* p. 183, *lissotate* p. 187 **spp. n.** Brazil; *lachnopyga* Moure a var. of *thygaterella* Schr. p. 186, MOURE Arq. Mus. paranaense **3** 1943.—*M.* (*Leptorachis*) *tenuitarsis* ♀ p. 16; (*Pseudocentron*) *leucopogonites, barbiellinii* **spp. n.** Brazil p. 17, MOURE Rev. Ent. Rio de J. **15.**—*M. arléi,* (*Chalicodroma*) *sefrensis* **spp. n.** N. Africa p. 88, BENOIST Bull. Soc. ent. Fr. **48** 1943.—*M.* classification of Neotropical spp. pp. 656–671, key to subgenn. p. 658; (*Pseudocentron*) *cordialis* **n. n.** for *cordovensis* Mitch. nec Schrottky; *Chrysosarus* p. 664, *Austromegachile* p. 666, *Ptilosarus* p. 667, *Dasymegachile* p. 669, *Dactylomegachile* p. 670 **subgenn. n.**; (*Chrysosarus*) *congruata* **n. n.** for *congruens* Mitch. nec Friese p. 666; *florensis* **n. n.** for *manaosensis* Mitch. nec Schr. p. 671 figs., MITCHELL Ann. ent. Soc. Amer. **36.**—*M.* (*Argyropile*) *parallela* Smith (= *verbesinae* Ckll.); (*Xeromegachile*) *legalis* Cress. (= *couleeana* Mitchell) p. 137; (*A.*) *subparallela* p. 132, (*Derotropis*) *melanderi* p. 140, (*D.*) *yumensis* p. 141 **spp. n.** U.S.A.; key to spp. of subgen. *D.* p. 142, MITCHELL Pan-Pacif. Ent. **20.**—*M.* revision of French spp. pp. 41–88, key p. 81; *muraria* **var. n.** *apennina* Italy p. 43; *circumcincta* **var. n.** *insidiosa* France p. 49; *mguildensis* **sp. n.** Morocco p. 50 figs., BENOIST Ann. Soc. ent. Fr. **109** (1940) 1941.—*M.* (*Creightonella*) *weenenica* Natal p. 246, *natensiella* S. Rhodesia, *pondonis* Pondoland p. 247, **spp. n.**, COCKERELL Proc. ent. Soc. Wash. **46.**

Megalopta insignis see *Megommation.*

Megommation **gen. n.** for *Megalopta insigne* Smith p. 479, MOURE Rev. Ent. Rio de J. **14** 1943.

Melissoptila status discussed p. 483, MOURE t.c.—*M. bonaerensis* see *Ptilomelissa*.

Mesonychium littoreum **sp. n.** Brazil p. 14, MOURE op. cit. **15**.

Neocorynura melamptera **sp. n.** Brazil p. 454, MOURE op. cit. **14** 1943.

Neopasites elegans p. 277, *knulli* p. 278, **spp. n.** Texas, LINSLEY J. N.Y. ent. Soc. **52**.

Nomia heterodoxa p. 46, *elgonica* p. 49 Uganda, *polytricha* Kabeta, E. Africa p. 48, **spp. n.**; *tricoloripes* ♀ p. 47, COCKERELL Psyche **51**.

Notomelitta rufocincta **sp. n.** Natal p. 407, COCKERELL J. Wash. Acad. Sci. **34**.

Odontochlora cydippe, phoemonöe see *Augochlora*.

Osmia ausica **sp. n.** S.W. Africa p. 249, COCKERELL Proc. ent. Soc. Wash. **46**.

Oxystoglossa andromache see *Paroxystoglossa crossotos*; *pyrgo* see *Augochlora*; *thauca* see *Paragapostemon*; *theia* see *Ceratalictus*.

Oxystoglossidia **gen. n.** p. 473, *uraniella* (type) p. 474, *uranioides* p. 476 **spp. n.** Brazil, MOURE Rev. Ent. Rio de J. **14** 1943.—*O. uranioides* see *Augochlorella michaelis*.

Paragapostemon oresicoetes **sp. n.** Brazil p. 456, MOURE Rev. Ent. Rio de J. **14** 1943.—*P. thauca* Schr. from *Oxystoglossa* p. 278, MOURE op. cit. **15**.

Paroxystoglossa crossotos Vach. (= *Oxystoglossa andromache* Schr.) from *Halictus*; *transversa* **sp. n.** Paraguay p. 477, MOURE op. cit. **14** 1943.

Pereirapis **gen. n.** p. 461, *rhizophila* **sp. n.** Brazil p. 464, MOURE t.c.

Podalirius Latr. 1802 permanently rejected p. 171, Opinion **151** Int. Comm. Zool. Nom.

Prosopis berlandi p. 41, *luteipes* p. 42, **spp. n.** Morocco, BENOIST Bull. Soc. ent. Fr. **48** 1943.—*P. luctuosa* **sp. n.** Kamerun p. 8, BENOIST op. cit. **49**.

Psaenythia hypsophila **sp. n.** Brazil p. 291, MOURE Rev. Ent. Rio de J. **15**.

Pseudagapostemon fluminensis ♂ redescription p. 276; *paraguayensis* **sp. n.** Paraguay p. 277, MOURE t.c.—*P. rufipes* **sp. n.** Brazil p. 148, MOURE Arq. Mus. paranaense **3** 1943.

Ptiloglossa hemileuca **sp. n.** Brazil p. 3, MOURE Rev. Ent. Rio de J. **15**.

Ptilomelissa **gen. n.** for *Melissoptila bonaerensis* Holmb. (type) p. 482; *ochromelaena* **sp. n.** Brazil p. 483, MOURE op. cit. **14** 1943.—*P. cnecomala* **sp. n.** Brazil p. 7, MOURE op. cit. **15**.

Ptilosarus **subgen. n.** (type *bertonii* Schr.) see *Megachile*.

Rhynchocolletes **gen. n.**, *albicinctus* **sp. n.** Brazil p. 447, MOURE Rev. Ent. Rio de J. **14** 1943.

Schwarziana **subgen. n.** (type *quadripunctata* Lep.) see *Trigona*.

Scrapter leonis, capensis discussed; *subincertus, merescens* p. 405, *sinophilus, brunneipennis* p. 406 **spp. n.** Cape Province, COCKERELL J. Wash. Acad. Sci. **34**.

Stelis (*Protostelis*) *signata eremica* ♂ p. 120; (*S.*) *phaeoptera meridionalis* ♂♀ p. 121 Cyprus, POPOV Proc. R. ent. Soc. Lond. (B) **13**.

Tapinotaspis serraticornis (*heathi*) see *Tapinotaspoides*.

Tapinotaspoides **gen. n.** for *Tapinotaspis serraticornis* Friese (= *heathi* Ckll.) p. 10, MOURE Rev. Ent. Rio de J. **15**.

Tmetocoelia **gen. n.** for *sulciventris* Friese (type), *tacarunensis* Ckll., *vigilans* Ckll., *tabascana* Ckll., *aethautis* Vach., *sodalis* Vach. p. 481, MOURE op. cit. **14** 1943.

Trigona (*Paratrigona*) *opaca* **var. n.** *anduzei* Venezuela p. 27, SCHWARZ Bol. Ent. venezol. **2** 1943.—*T.* (*Geotrigona* p. 146, *Schwarziana* p. 147 **subgenn. n.**), MOURE Arq. Mus. paranaense **3** 1943.—*T. huberi* see *Duckeola*.

Xylocopa kamerunensis ♂♀ p. 12, BENOIST Bull. Soc. ent. Fr. **49**.

Sphecoidea.

SPHEGIDAE (*s.l.*).

Sphegidae of Parc Nat. Albert, Belg. Congo, ARNOLD Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. **43** 1943 pp. 71–84, 2 figs.

Discussion on the type spp. of Palaearctic Sphegids, HONORÉ Bull. Soc. Fouad 1er Ent. **27** 1943 pp. 29–56.

Revision of Pemphilidinae (key to genn. pp. 335–340), PATE Amer. Midl. Nat. **31** pp. 329–384.

Alysson guillarmodi **sp. n.** Basutoland p. 20 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Amaripa **gen. n.** pp. 337, 344, *thauma* **sp. n.** Brit. Guiana p. 346, PATE Amer. Midl. Nat. **31**.

Ammoplanus revision of Nearctic spp. pp. 141–163, characters p. 142, keys to subgenn. p. 143, to spp. pp. 144, 158; (*A.*) *loti* p. 146, (*A.*) *tetli* p. 147, (*A.*) *sechi* p. 149, (*A.*) *chemehuevi* p. 151, (*A.*) *vanyumi* p. 154, (*A.*) *quabajai* p. 156 **spp. n.**; (*Parammoplanus*) *lenape* **subsp. n.** *olamentke* p. 160 U.S.A. figs., PATE Bull. S. Calif. Acad. Sci. **41** (1942) 1943.

Apocrabro **subgen. n.** (type *aëta* sp. n.) see *Crossocerus*.

Bembix triangulifera **n. n.** for *stevensoni* Arn. nec Park., ♀ p. 23, ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Chimila **gen. n.** pp. 339, 371, *paë* **sp. n.** Colombia p. 373, PATE Amer. Midl. Nat. **31**.

Crabro canaliferus p. 28, *cruentatus* p. 29, *pullatus* p. 31, *minutulus* p. 33, *repositus* p. 34 **spp. n.** S. Rhodesia; *vumbuiensis* p. 30, *croceosignatus* p. 32 ♀♀; *angusticollis* ♂ p. 33 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11. —*C. stramineipes* ♀ p. 83, ARNOLD Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943 (also in Occ. Pap. nat. Mus. S. Rhod. **2** no. 11 p. 38).—*C.* (*Rhopalum*) *quitensis* **sp. n.** Ecuador p. 82, BENOIST Ann. Soc. ent. Fr. **111** 1942.—*C. spinifrons* see *Vechtia*; *tridentatus* see *Crossocerus impressifrons*; *tarsalis* see *Crossocerus*; *nigror* see *Crossocerus cinctipes*; *ater* see *Crossocerus pammelas*; *propinquus* see *Crossocerus pelas*; *pictipes* see *Crossocerus chromatipus*.

Crossocerus revision of subgenn. pp. 267–317; (*Yuchiha* **subgen. n.**) pp. 270, 272, (*Y.*) *xanthochilos* Georgia p. 274, (*Y.*) *phaeochilos* Mexico p. 276, (*Y.*) *melanochilos* Formosa p. 277, **spp. n.**; (*C.*) *chromatipus* **n. n.** for *Crabro pictipes* Fox nec H.-S.; (*C.*) *pelas* **n. n.** for *Crabro propinquus* Fox nec Shuck. p. 280; (*Apocrabro* **subgen. n.**) pp. 271, 282, (*A.*) *aëta* Philippines p. 285, (*A.*) *loa* Formosa p. 287 **spp. n.**; (*Blepharipus*) key p. 295; (*B.*) *pammelas* **n. n.** for *Crabro ater* Cress. nec Ol. p. 299; (*B.*) *stricklandi* Canada p. 301, (*B.*) *stictochilos* p. 304, (*B.*) *fergusoni* p. 307 U.S.A., **spp. n.**; (*B.*) *cinctipes* Prov. (= *Crabro nigror* Fox) p. 303; (*B.*) *impressifrons* F. Smith (= *Crabro tridentatus* Rohw.); (*B.*) *tarsalis* Fox from *Crabro* p. 310; (*Nothocrabro* pp. 271, 314, *Stictoptila* pp. 271, 315 **subgenn. n.**), PATE Lloydia **6** 1943.

Diodontus hesperus **n. n.** for *occidentalis* Mall. nec Fox; *parenosas* **n. n.** for *trisulcus* Mall. nec Fox; *trisulcus* Fox (= *sulcatus* Mall.) p. 133, PATE Canad. Ent. **76**.

Entomognathus (*Koxinga*, *Mashona*, *Toncahua* **subgenn. n.**); (*K.*) *siraiya* **sp. n.** Formosa p. 341; key to subgenn. p. 340, PATE Amer. Midl. Nat. **31**.

Gorytes lepidus **sp. n.** Basutoland p. 22 fig., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Koxinga **subgen. n.** (type *siraiya* sp. n.) see *Entomognathus*.

Larra proditor Kohl a race of *betsilea* Sauss.; *erythropyga* ♂ p. 23; *impressifrons* ♀ p. 25 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Leptolarra alberti **sp. n.** Belg. Congo p. 79 figs., ARNOLD Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943; described again as *Liris* (*Motes*) *alberti* (q.v.) p. 37, ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.—See *Liris*.

Liris F., *Motes* Kohl reduced to subgen. (=*Notogonia* Costa, *Notogonidea* Rohw., *Leptolarra* Cam.); *transvaalensis* r. *grisolea* Arn. a race of *antaca* Sauss.; *felina* Arn. a race of *alaris* Sauss.; *reticulata* Sauss. (= *nigricans* r. *palumbula* Kohl) p. 23; (*M.*) *alberti* **sp. n.** Belg. Congo p. 37 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Mashona **subgen. n.** (type *apiformis* Arn.) see *Entomognathus*.

Miscophus revision of Egyptian spp. pp. 119–143, key p. 128; *alfierii* p. 125, *clypearis* p. 127, *politus* p. 128, *niloticus* p. 131, *funebris* p. 132, *mimeticus* p. 133, *frater* p. 135, *aenigma* p. 136,

rubriventris (with **var. n.** *nigripes* p. 142) p. 141, *collaris* p. 143 **spp. n.**; *pretiosus* **var. n.** *brunnescens* p. 131; *manzonii* **var. n.** *nigripes* p. 140 Egypt; *aegyptius* ♂ p. 135 fig., HONORÉ Bull. Soc. Fouad 1er Ent. **28**.

Motes a subgen. of *Liris*, q.v.

Nothocrabro **subgen. n.** (type *nitidiventris* Fox) see *Crossocerus*.

Notogonia see *Liris*.

Notogonidea see *Liris*.

Paë **gen. n.** pp. 339, 364, *paniquita* (type) Colombia p. 366, *amaripa* Br. Guiana p. 369, **spp. n.**, PATE Amer. Midl. Nat. **31**.

Pison rufitarse **sp. n.** S. Rhodesia p. 19, ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Piyuma **gen. n.** pp. 339, 356, *koxinga* **sp. n.** Formosa p. 358, PATE Amer. Midl. Nat. **31**.

Psen (*Mimesa*) *psychrus* **n. n.** for *borealis* Smith nec Dahlb.; (*M.*) *ezra* **n. n.** for *argentifrons* Cress. 1865 (p. 487 nec p. 152) p. 133, PATE Canad. Ent. **76**.

Sphex revision of Egyptian spp. pp. 45–79, key p. 50 figs., HONORÉ Bull. Soc. Fouad 1er Ent. **28**.

Stictoptila **subgen. n.** (type *confertus* Fox) see *Crossocerus*.

Stigmus gueinzius ♂ p. 27, ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.—*S. rumbipambensis* **sp. n.** Ecuador p. 84, BENOIST Ann. Soc. ent. Fr. **111** 1942.

Sylaon quitensis **sp. n.** Ecuador p. 85, BENOIST t.c.

Tachysphex lacertosus **sp. n.** S. Rhodesia p. 25; *georgii* **subsp. n.** *montivagus* Basutoland p. 26 fig., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Tachytes gracilicornis **sp. n.** Portuguese E. Africa p. 27 fig., ARNOLD t.c.

Taruma **gen. n.** pp. 339, 360, *bara* **sp. n.** Br. Guiana p. 362, PATE Amer. Midl. Nat. **31**.

Toncahua **subgen. n.** (type *texanus* Cress.) see *Entomognathus*.

Trypoxylon aeneipennis **sp. n.** Belg. Congo p. 71 fig., ARNOLD Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 43 1943 (also in Occ. Pap. nat. Mus. S. Rhod. **2** no. 11 p. 35).—*T. chirindensis* **subsp. n.** *nodosum* S. Rhodesia; *abditum* ♀ p. 18 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

Vechtia **gen. n.** for *Crabro spinifrons* Bingh. pp. 339, 377, PATE Amer. Midl. Nat. **31**.

Yuchiha **subgen. n.** (type *xanthochilos* sp. n.) see *Crossocerus*.

Vespoidea.

BETHYLIDAE, DRYINIDAE.

Bethylus Latr. [1802–03], *Omalus fuscicornis* Jur. designated type and placed on official list, Opinion **153**, Int. Comm. Zool. Nom.

Dryinus Latr. [1804] placed on official list (type *formicarius* Latr.), Opinion **153**, Int. Comm. Zool. Nom.

Pseudogonatopus pyrillae **sp. n.** India p. 161, MANI Indian J. Ent. **4** 1942.

SAPYGIDAE.

Sapyga clavicornis morphological notes p. 625, LECLERCQ Bull. Soc. Sci. Liége 1942 no. 11.

MUTILLIDAE.

Mutillidae of Georgia, FATTIG Emory Univ. Mus. Bull. no. 1 1943 24 pp.

Dasymutilla quadriguttata Say (=*permista* Mickel) p. 198, REMINGTON Ann. ent. Soc. Amer. **37**.

Methoca braunsi var. *cataractae* further description p. 1; *andréi* Cape Province p. 2, *fulgida* S. Rhodesia, *johannis* Pondoland p. 5 **spp. n.**; *mosotuana* ♀ p. 4 figs., ARNOLD Occ. Pap. nat. Mus. S. Rhod. **2** no. 11.

POMPILIDAE (PSAMMOCHARIDAE).

Pompilidae of British Guiana (key to subfamm. p. 98), BANKS Zoologica **29** pp. 97–112.

Preliminary revision of Pompilinae (exclusive of the tribe Pompilini) of the Americas, BRADLEY Trans. Amer. ent. Soc. **70** pp. 23–157, 2 pls.

Generic position of Mexican Pompilidae discussed, BRADLEY Notul. Nat. no. 145, 12 pp.

Pompilidae of Spain (concld.), JUNCO Y REYES Eos **20** pp. 123–172, 7 pls. 33 figs.

Agenia nobilitata, gloriosa, pilifrons see *Phanochilus*; *A. orbiculata* see *Cressochilus*.

Ageniella delila **sp. n.** Br. Guiana p. 108, BANKS Zoologica **29**.—*A. novella* Cress., *levipes* Cress. from *Pompilus* p. 4, BRADLEY Notul. Nat. no. 145.

Alasagenia **gen. n.** p. 106, *erichsoni* **sp. n.** Br. Guiana p. 107, BANKS Zoologica **29**.

Allaporus rufiventris Cress. (= *Aporus minimus* Cress., *Planiceps pulchella* Bks., *P. hesperus* Bks.) from *Aporus* p. 120 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Allochares azureus Cress. (= *bruesi* Bks., *Pompilus sinaloae* Cam.) from *Pseudagenia* p. 149, BRADLEY t.c.

Allocyphonyx albocaudatus Mall. from *Pedinaspis* p. 152, BRADLEY t.c.

Anoplius lepidus Say, *simulans* Cress. from *Pompilus* p. 9, BRADLEY Notul. Nat. no. 145.

Aplochares **gen. n.** for *Pompilus imitator* Sm. p. 111, BANKS Zoologica **29**.

Aporus key to subgenn. p. 87 (*Plectraporus* p. 97, *Notoplaniceps* p. 100, *Neoplaniceps* p. 104 **subgenn. n.**); (*A.*) *hermes* U.S.A. p. 94, (*A.*) *zapotecus* Mexico p. 96, (*Notoplaniceps*) *fenestralis* Colombia etc. p. 101, (*Neoplaniceps*) *prolixus* Virgin Is. p. 105, (*N.*) *cariborum* St. Vincent p. 106 **spp. n.**; *luxus* Bks. p. 90, *niger* Cress. (= *Planiceps minor* Fox, *P. compressus* Bks.) p. 92, *bequaerti* Bks., *yavapai* Bks. p. 95, *hirsutus* Bks. p. 99, *innotatus* Bks. p. 103, *tarsalis* Ashm. p. 104 from *Planiceps*; *concolor* Sm., *pulchritarsis* Cam. from *Pompilus* p. 97 figs., BRADLEY Trans. Amer. ent. Soc. **70**.—*A. minimus* see *Allaporus rufiventris*.

Arachnophroctonus torridus Smith from *Pompilus* p. 9; *anahuacensis* **n. n.** for *P. mexicanus* Taschenb. p. 10, BRADLEY Notul. Nat. no. 145.

Aspidaporus **gen. n.** for *Planiceps jugosus* Fox (type) p. 122; *minusculus* **sp. n.** Brazil p. 123 fig., BRADLEY Trans. Amer. ent. Soc. **70**.

Aulocostethus aztecus Cress. from *Epipompilus* p. 142; *excelsus* **sp. n.** Brazil p. 143, BRADLEY t.c.

Balboana fulvipes **sp. n.** Br. Guiana p. 103, BANKS Zoologica **29**.

Calicurgus accolens Cress. p. 2, *impiger* Cress., *rupex* Cress. p. 3 from *Pompilus*, BRADLEY Notul. Nat. no. 145.

Ceratopompilus **subgen. n.** (type *sexmaculatus* Spin.) see *Ferreoloides*.

Chelaporus **gen. n.** for *Pedinaspis anomala* Bks. p. 116 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Cosmiaporus **gen. n.** for *Planiceps diverticulus* Fox p. 108 fig., BRADLEY t.c.

Cressochilus key to spp. p. 150; *dakota* Cress. (= var. *pallidicornis* Cress., ? *Priocnemis kiowa* Banks) p. 151, *apache* Banks p. 152 from *Priocnemis*, BRADLEY Canad. Ent. **76**.—*C. orbiculatus* Smith from *Agenia* p. 7, BRADLEY Notul. Nat. no. 145.

Cryptocheilus margaretella Rohw. from *Pedinaspis* p. 79, BRADLEY Trans. Amer. ent. Soc. **70**.—*C. enigma* emended to *aenigma*, further description p. 148 figs., JUNCO Y REYES Eos **20**.—*C. inaequalis* see *Dinocnemis*.

Dicyrtomalis **gen. n.** for *Pompilus connexus* Cress. (type), *confusaneus* Cress. p. 11, BRADLEY Notul. Nat. no. 145.

Dinocnemis Banks raised to genus, *fortis* Cress. designated type p. 131; *inaequalis* Banks from *Cryptocheilus*; *albopilosa* Cress. (= *Priocnemis fotella* Banks) from *Priocnemis* p. 132, BRADLEY Canad. Ent. **76**.—*D. oregona, nigripes* see *Priocnemis*.

Dipogon nubifer Cress. from *Pompilus* p. 5, BRADLEY Notul. Nat. no. 145.

Drepanaporus **gen. n.** for *Planiceps collaris* Cress. p. 109 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Epipompilus azteca see *Aulocostethus*.

Episyron porus Fox from *Pompilus* p. 11, BRADLEY Notul. Nat. no. 145.

Euplaniceps key to subgenn. p. 126, key to spp. of subgen. *E.* p. 127; (*E.*) *herbertii* Fox from *Planiceps* p. 128; (*E.*) *lacordairii* Guér. (= *P. zikani* Schr.) p. 130, (*E.*) *saussurei* Kohl p. 134, *ornatula* D.T. p. 137, *quadrimaculata* Sm., *venusta* Guér. p. 138 from *Pompilus*; (*E.*) *varia* Peru p. 129, (*E.*) *punctata* Bolivia p. 131, (*E.*) *petulans* Paraguay, (*E.*) *sima* Venezuela p. 133

spp. n.; (*Pholidaporus* **subgen. n.**) (*P.*) *perpicta* Fox from *Planiceps* p. 136 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Ferreoloides Haupt (= *Pompiloides* Haupt nec *Pompilioides* Rad.), *Pompilus moestus* Klug designated type p. 95; *Ceratopompilus* **subgen. n.** p. 97; (*C.*) *gussakovskyi* **sp. n.** Samarkand p. 98, BRADLEY Eos **20**.

Hemipepsis mexicana Cress. from *Mygnimia* p. 7, BRADLEY Notul. Nat. no. 145.

Idopedinaspis see *Psorthaspis*.

Melanaporus euferalis see *Odontaporus*.

Mygnimia mexicana see *Hemipepsis*.

Neoplaniceps **subgen. n.** (type *tarsalis* Ashm.) see *Aporus*.

Notoplaniceps **subgen. n.** (type *fenestralis* sp. n.) see *Aporus*.

Odontaporus **gen. n.** for *Planiceps notabilis* Smith (type) p. 110, *P. cupripennis* Bks. p. 111, *Melanaporus euferalis* Fox p. 112; *simulatrix* Porto Rico, Cuba p. 113, *aureolus* Mexico p. 115, *comptus* Panama p. 116 **spp. n.**; *notabilis* Sm. from *Pompilus* p. 114 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Parapompilus naomi see *Psorthaspis*.

Pedinaspis macronotum and other spp. see *Psorthaspis*; *margaretella* see *Cryptocheilus*; *anomala* see *Chelaporus*; *albocaudata* see *Allocyphonyx*.

Pepsis key to spp. of Br. Guiana p. 99, BANKS Zoologica **29**.

Phanochilus **gen. n.** for *Agenia nobilitata* Sm. (type), *gloriosa* Sm., *pilifrons* Sm. p. 108, BANKS Zoologica **29**.

Pholidaporus **subgen. n.** (type *perpictus* Fox) see *Euplaniceps*.

Planiceps pertyi **sp. n.** Br. Guiana p. 112, BANKS Zoologica **29**.—*P. antillarum* **sp. n.** Haiti, Cuba p. 107, BRADLEY Trans. Amer. ent. Soc. **70**.—*P. luxus, niger* (*minor, compressus*), *bequaerti, yavapai, hirsutus, innotatus, tarsalis* see *Aporus*; *diverticulus* see *Cosmiaporus*; *collaris* see *Drepanaporus*; *notabilis, cupripennis* see *Odontaporus*; *pulchella, hesperus* see *Allaporus rufiventris*; *jugosus* see *Aspidaporus*; *herbertii, perpicta* see *Euplaniceps*; *zikani* see *E. lacordairii*.

Plectraporus **subgen. n.** (type *hirsutus* Banks) see *Aporus*.

Poecilopompilus flavopictus Smith from *Pompilus* p. 10, BRADLEY Notul. Nat. no. 145.

Pompilinus orthodes **sp. n.** Br. Guiana p. 112, BANKS Zoologica **29**.

Pompiloides see *Ferreoloides*.

Pompilus nobilus see *Priochilus*; *imitator* see *Aplochares*; *accolens, impiger, rupex* see *Calicurgus*; *connexus* see *Psammochares rubriventris*; *connexus, confusaneus* see *Dicyrtomalis*; *flavopictus* see *Poecilopompilus*; *gloriosus* see *Priochilus*; *lepidus, simulans* see *Anoplius*; *novella, levipes* see *Ageniella*; *mexicanus* see *Arachnophroctonus anahuacensis*; *nubifer* see *Dipogon*; *porus* see *Episyron*; *sartorianus* see *Priophanes*; *torridus* see *Arachnophroctonus*; *formosus, variegatus* see *Psorthaspis*; *telemon* see *Psorthaspis laevifrons*; *aequus* see *Psorthaspis planata*; *capucinus* see *Psorthaspis unicolor*; *lacordairii, saussurei, ornatulus, quadrimaculatus, venustus* see *Euplaniceps*; *sinaloae* see *Allochares*; *concolor, pulchritarsis* see *Aporus*.

Priochilus **gen. n.** for *Pompilus nobilus* F. p. 82, BANKS Psyche **50** 1943.—*P. gloriosus* Cress. from *Pompilus* p. 6, BRADLEY Notul. Nat. no. 145.—*P.* key to ♀♀ of Br. Guiana p. 104; *imperius, superbus, plutonius* p. 105, *formosus* p. 106 **spp. n.** Br. Guiana, BANKS Zoologica **29**.

Priocnemella eurytheme p. 109, *difformis* p. 110, **spp. n.** Br. Guiana, BANKS t.c.

Priocnemioides fulvicornis Cress. designated type p. 102; *bituberculatus* further description; *aurifrons* **sp. n.** Br. Guiana p. 103, BANKS t.c.

Priocnemis oregona Banks, *nigripes* Cress. from *Dinocnemis* p. 131, BRADLEY Canad. Ent. **76**.—*P.* spp. characters of ♀♀ p. 206, CHAMBERS J. Soc. Br. Ent. **2**.—*P. facetus* see *Priophanes*; *albopilosa* (*fortella*) see *Dinocnemis*; *dakota, apache* see *Cressochilus*.

Priophanes **gen. n.** for *Priocnemis facetus* Cress. p. 82, BANKS Psyche **50** 1943.—*P. sartorianus* Cress. from *Pompilus* p. 6, BRADLEY Notul. Nat. no. 145.—*P. fabricii* **sp. n.** Br. Guiana p. 107, BANKS Zoologica **29**.

Psammochares rubriventris **n. n.** for *Pompilus connexus* Fox nec Cress. p. 9, BRADLEY Notul. Nat. no. 145.

Pseudagenia key to ♀♀ of Br. Guiana; *incrota* **sp. n.** Br. Guiana p. 109, BANKS Zoologica **29**.—*P. azurea* see *Allochares*.

Psorthaspis Banks (= *Idopedinaspis* Haupt) p. 32, to Ctenoceratini from Pedinaspini p. 34, key to spp. p. 37; *morosa* p. 42, *levis* p. 43, *cressoni* p. 59, *conocephala* p. 67 U.S.A., *guatemalae* Guatemala p. 43, *nahuatlensis* p. 46, *banksi* p. 55 Mexico, *coelestis* p. 46, *bioculata* p. 70 Costa Rica, *colombiae* Colombia p. 47, *hispaniolae* Dominican Repub., Haiti p. 50, *canipennis* Panama p. 71 **spp. n.**; *macronotum* Kohl p. 44, *purpuripennis* Cress. p. 48, *avinoffi* Bks. p. 49, *nigriceps* Bks. p. 51, *australis* Bks. p. 57, *vicina* Cress. p. 61, *brimleyi* Mall. p. 63, *texana* Cress. p. 64, *sanguinea* Sm. p. 65, *magna* Bks. p. 67, *picta* Kohl p. 68, *alternata* Bks. p. 69, *impudica* Cam., *bugabensis* Cam. p. 72, *elegans* Cress., *mariae* Cress. p. 74, *luctuosa* Bks., *legata* Cress. p. 76, *eubule* Cam. p. 78 from *Pedinaspis*; *formosa* Sm. p. 58, *variegata* Sm. p. 73 from *Pompilus*; *naomi* Sm. from *Parapompilus*; *laevifrons* Cress. (= *Pompilus telemon* Cam.) p. 45; *planata* Fox (= *Pompilus aequus* Fox, *Sophropompilus tumifrons* Bks., *Pedinaspis bucephala* Mall.) p. 52; *unicolor* Sm. (= *Pompilus capucinus* D.T.) p. 79 figs., BRADLEY Trans. Amer. ent. Soc. **70**.

Rhabdaporus **gen. n.**, *bellus* **sp. n.** Brazil p. 121, BRADLEY t.c.

Sericopompilus exilis **sp. n.** Br. Guiana p. 111, BANKS Zoologica **29**.

Sophropompilus tumifrons see *Psorthaspis planata*.

VESPIDAE (including MASARIDAE, EUMENIDAE).

Alpha see *Polybia*.

Ancistrocerus revision of N. American spp. pp. 225–286, key to spp. p. 237; *waldenii* **varr. n.** *excavatus* p. 244, *flavidulus* p. 246; *tigris* **var. n.** *albolacteus* p. 260 Canada and U.S.A.; *neocallosus* p. 264 (with **var. n.** *discopictus* p. 268), *paracallosus* p. 269 **spp. n.**; *antilope* **varr. n.** *allegrus* U.S.A. p. 276, *spenceri* Canada p. 277; *lineativentris* **var. n.** *kamloopsensis* Canada, U.S.A. p. 280; *unifasciatus* **var. n.** *seminole* Florida p. 282; *catskillensis* Sauss. (= *sexcingulatus* Ashm., *gunnisonensis* Cam.) p. 250; *c.* var. *halophilus* Vier. (= *tahoensis* Rohw.) p. 255; *cytainus* Cam. a var. of *tigris* Sauss. p. 262; *antilope* Panz. (= *capra* Sauss., *nearcticus* Cam., *lecontei* Cam.) p. 273; *navajo* Beq. a var. of *antilope* p. 276 figs., BEQUAERT Ent. amer. (N.S.) **23**.

Eumenes revision of Canadian spp. pp. 75–88; *coloradensis* **varr. n.** *nearcticus* p. 82, *stricklandi* p. 84; *verticalis* **var. n.** *neoboreus* p. 87 Canada, BEQUAERT Nat. canad. **71**.

Mischocyttarus socialis Sauss. (= *atra* Ol., *decepta* Fox) p. 721; discussed pp. 717–722; *imitator* Zikan a var. of *cassununga* Iher. p. 720 figs., BEQUAERT Ann. ent. Soc. Amer. **36**.

Polistes list of European spp. p. 137, key p. 138, morphological notes on French spp. pp. 140–144 figs., BERLAND Ann. Soc. ent. Fr. **111** 1942.

Polybia Lep. (= *Alpha* Sauss.) p. 99, BEQUAERT Rev. Ent. Rio de J. **15**.—*P. ignobilis* Hal. (= *atra* Sauss., *nigra* Sauss.) discussed pp. 718, 723; *theresiana* Schulz status discussed p. 726; *tinctipennis* **var. n.** *nebulosa* Trinidad, Br. Guiana p. 728; *rufitarsis* **var. n.** *peruviana* Peru, Bolivia p. 729 figs., BEQUAERT Ann. ent. Soc. Amer. **36**.

Protopolybia revision of Neotropical spp. pp. 97–134; *bifasciata* Sauss. designated type p. 99; key to spp. p. 100; *chanchamayensis* p. 101, *weyrauchi* p. 126 Peru, *scutellaris* Costa Rica p. 111, *amarella* Br. Guiana, Colombia p. 113 **spp. n.**; *minutissima* Spin. key to color forms p. 106; *m.* **subsp. n.** *rubrithorax* Peru p. 110; *picteti* Sauss. key to color forms p. 116; *p.p.* ♂ p. 118; *p.* **subspp. n.** *biguttata* Peru p. 119, *perfulvula* Panama, Costa Rica, *wheeleri* Panama p. 121; *fulvotincta* Cam., *iheringi* Ducke ff. of *picteti* p. 120; *pumila* Sauss. key to color forms p. 123, a valid sp., ♂ p. 124; *acutiscutis* Cam. p. 125, *rotundata* Ducke p. 126 ff. of *pumila* figs., BEQUAERT Rev. Ent. Rio de J. **15**.

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Vespula key to and list of Michigan spp. pp. 323–329 figs., DREISBACH Pap. Mich. Acad. Sci. Arts Lett. **28** (1942) 1943.

Chrysidoidea.

CHRYSIDIDAE.

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Formicoidea.

FORMICIDAE.

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Some corrections to the type species of the genera and subgenera of Formicidae, DONISTHORPE Ent. mon. Mag. **80** p. 59.

Revision of genn. and subgenn. of male ants of United States, SMITH Amer. Midl. Nat. **30** 1943 pp. 273–321, 60 figs.

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Atta (*Neoatta*) *capiguara* **sp. n.** Brazil p. 234 figs., GONÇALVES Rev. brasil. Biol. **4**.

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Cryptocerus Latr. nec F. see *Cephalotes*.

Decamera see *Hincksidris*.

Diabolus see *Karawajewella*.

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Morleyidris **subgen. n.** (type *trina* sp. n.) see *Polyrhachis.*

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Polyrhachis (*Morleyidris* **subgen. n.**) *trina* Dutch New Guinea p. 64, (*Hedomyrma*) *nitens* Waigeu I., (*Hagiomyrma*) *semiobscura* New Ireland, Bismarck Arch. p. 65 **spp. n.** fig., DONISTHORPE Ent. mon. Mag. **80.**

Pristomyrmex castor Papua p. 81, *pollux* Penang **spp. n.**; *pungens* Mayr (= *japonicus* Forel) p. 83; list of known spp. p. 84, DONISTHORPE Proc. R. ent. Soc. Lond. (B) **13.**

Pseudomyrma revision pp. 59–103, key to workers p. 62; *acanthobia* subsp. *deliculata* **var. n.** *limai* Peru; *allidora* Panama p. 77, *antiguana* p. 78 (with **var. n.** *brunnipes* p. 79), *weberi* p. 96 Guatemala, *bradleyi* p. 82, *colei* p. 83 (with **var. n.** *vistana* p. 84), *santschii* p. 89, *voytowskii* p. 95 (with **var. n.** *costaricensis* Costa Rica p. 96), *weesoni* p. 97 (with **var. n.** *tuberculata*), *wheeleri* p. 98 Peru, *crenulata* Mexico p. 84 **spp. n.**; *arboris-sanctae* **var. n.** *ecuadoriana* Ecuador p. 79; *belti* **subspp. n.** *bequaerti* Honduras p. 80, *venifica* p. 81; *brunnea* **var. n.** *nigrita* p. 82 Mexico; *gracilis* **varr. n.** *peruviana* p. 86, *longinoda* p. 87 Peru; *kuenckeli* **var. n.** *hondurana* Honduras p. 87; *laevigata* **subsp. n.** *insularis* Panama; *latinoda* **var. n.** *coronata* Br. Guiana p. 88; *sabanica* **var. n.** *saffordi* Mexico p. 89; *sericea* **varr. n.** *acaciorum* Panama, *lisa* Peru p. 90; *spinolae* [sic = *spinicola*] **varr. n.** *infernalis* Panama, *scelerosa* Nicaragua p. 91; *tenuis* **varr. n.** *andina* Peru, *guatemalensis* Guatemala p. 92; *triplaridis* (worker p. 92) (with **subspp. n.** *biolleyi* p. 93, *boxi*, *trigona* p. 94 Br. Guiana) figs., ENZMANN Psyche **51** [cf. Wheeler Z.R. **80** 1943 p. 155.]

Thaumatomyrmex characters p. 66, key to spp.; *paludis* **sp. n.** Venezuela p. 68 figs., WEBER Bol. Ent. venezol. **1** 1942.—*T.* characters of workers p. 97, key to Neotropical spp.; *zeteki* **sp. n.** Panama p. 99, SMITH Proc. ent. Soc. Wash. **46.**

Trachymyrmex smithi **sp. n.** Mexico p. 5, BUREN Psyche **51.**

Proctotrupoidea (Serphoidea).

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Allotropa burrelli early stages pp. 160, 164–165 figs., CLANCY J. agric. Res. **69.**

Ectadius gynomamertes **sp. n.** (= *mamertes* Wlk. ♀ nec ♂) p. 38, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Hadronotus ajax early stages p. 628 figs., SCHELL Ann. ent. Soc. Amer. **36.**

Liophanurus samueli **sp. n.** India p. 153, MANI Indian J. Ent. **4** 1942.

Platyllotropa see *Triclavus.*

Telenomus saccharicola **sp. n.** India p. 26, MANI Indian J. Ent. **3** 1941.

Triclavus Brèth. (= *Platyllotropa* Szel.) re-description; *drakei* **sp. n.** Iowa p. 156 figs., OGLOBLIN Proc. ent. Soc. Wash. **46.**

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Calliceras amesicola **sp. n.** Iowa p. 155 figs., OGLOBLIN Proc. ent. Soc. Wash. **46.**

Chalcidoidea.

TORYMIDAE (CALLIMOMIDAE).

Callimome Spin. 1811 permanently rejected, Opinion **155**, Int. Comm. Zool. Nom.

Holaspis indicus **sp. n.** India p. 153 fig., MANI Indian J. Ent. **4** 1942.

Misocampe Latr. 1818 permanently rejected, Opinion **155**, Int. Comm. Zool. Nom.

Torymus Dalm. 1820, *Ichneumon bedeguaris* L. 1758 designated type and placed on official list, Opinion **155**, Int. Comm. Zool. Nom.

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Bephratoides saccharicola **sp. n.** India p. 27, MANI Indian J. Ent. **3** 1941.

Decatoma Spin. see *Eurytoma*; auct. see *Eudecatoma*.

Eudecatoma Ashm. (= *Decatoma* auct. nec Spin.) p. 37, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Eurytoma Ill. (= *Decatoma* Spin.) *aterrimus* Schr. (= *adonidum* Rossi) p. 37, HINCKS t.c.—*E.* re-description of *laxitas* complex of *mucronura* group p. 23; *plana* p. 24, *ingens* p. 26 **spp. n.** Mexico figs., BUGBEE J. Kans. ent. Soc. **17**.

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Kapaloides **gen. n.**, *travancorensis* (type) Travancore p. 155, *andamanensis* Andamans p. 156, **spp. n.** figs., MANI Indian J. Ent. **4** 1942.

ENCYRTIDAE (including APHELINIDAE).

Encarsia isaaci p. 34, *muliyali* [sic] p. 35, **spp. n.** India, MANI Indian J. Ent. **3** 1941.

Eretmocerus delhiensis **sp. n.** India p. 35, MANI t.c.

Ixodiphagus mysorensis **sp. n.** India p. 29 figs., MANI t.c.

Liothorax see *Mayrencyrtus*.

Litomastix daccaensis **sp. n.** India p. 28 figs., MANI Indian J. Ent. **3** 1941.

Mayrencyrtus **n. n.** for *Liothorax* Mayr nec Motsch. p. 37, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Ooencyrtus prenidis **sp. n.** Porto Rico p. 137, GAHAN J. Agric. Univ. P. Rico **27** 1943.

PTEROMALIDAE (including MISCOGASTERIDAE).

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Dinarmus sauteri Mani (= *coimbatorensis* Ferrière) p. 30, MANI Indian J. Ent. **3** 1941.

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Eutelus see *Amblymerus*.

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Neopolycelis **n. n.** for *Polycelis* Thoms. nec Ehrenb. p. 38, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Pachyneuron syrphiphagum ♀ p. 5 fig., DE SANTIS Dagi **1** 1942.

Polycelis see *Neopolycelis*.

Systasis dalbergiae **sp. n.** India p. 157 fig., MANI Indian J. Ent. **4** 1942.

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Aprostocetus krishnieri **sp. n.** India p. 36 figs., MANI Indian J. Ent. **3** 1941; early stages pp. 228–230 figs., KRISHNA IYER Indian J. Ent. **4** 1942.

Euplectrus plecopterae p. 31, *gopimohani* p. 33, **spp. n.** India fig., MANI Indian J. Ent. **3** 1941.

Trichospilus diatraeae **sp. n.** S. India p. 101 figs., CHERIAN & MARGABANDHU Indian J. Ent. **4** 1942.

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Alaptus ramakrishnai p. 159, *delhiensis* p. 160, **spp. n.** India figs., MANI Indian J. Ent. **4** 1942.

Anagrus yawi **sp. n.** Mexico p. 57, FULLAWAY Proc. Hawaii. ent. Soc. **12**.

Mymar Curt. discussion of type p. 38, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.—*M. indica* **sp. n.** India p. 160 fig., MANI Indian J. Ent. **4** 1942.

Cynipoidea.

CYNIPIDAE.

Cynipids on oak in N. America, HOUARD Zoocéc. Plantes Amer. Nord 1940 549 pp. 1 map 1893 figs.

Amblynotus syrphidiphagus **sp. n.** India p. 62 fig., NARAYANAN Indian J. Ent. **3** 1941.

Andricus bracteatus p. 7, *coortus* p. 8, *costatus* p. 9, *formosalis* p. 10, *furnessulus* p. 12, *stramineus*, *vernus* p. 13 **spp. n.** U.S.A.; *flavohirtus* Beut. from *Callirhytis* p. 10; *nigridius* **n. n.** for *nigra* Full. nec Tav. from *Callirhytis* (= *Diplolepis operta* Weld) p. 11 figs., WELD Proc. U.S. nat. Mus. **95** no. 3178.

Callirhytis balanacea p. 16, *bipapillata* p. 17, *electrea* p. 18, *florensis* p. 19, *juvenca* p. 20, *lupana* p. 21, *perrugosa*, *sonorae* p. 22, *uvellae* p. 23, **spp. n.** U.S.A. figs., WELD t.c.—*C. flavohirtus* see *Andricus*; *nigra* see *Andricus nigridius*.

Ceroptres confertus McC. & Egb. from *Periclistus* p. 2, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Coneucoela tanganyikensis **sp. n.** Tanganyika p. 63, WELD Proc. ent. Soc. Wash. **46**.—*C. gracilicornis* see *Odonteucoila*.

Dimicrostrophis see *Trybliographa*.

Diplolepis operta see *Andricus nigridius*.

Dryocosmus albidus **sp. n.** U.S.A. p. 15, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Dryophanta pulchella see *Trigonaspis*.

Figites floridensis **n. n.** for *floridana* (from *Tavaresia*) Ashm. 1893 nec 1887; ♀ p. 62, WELD Proc. ent. Soc. Wash. **45**.

Figitodes Ashm. genotype *atricornis* Ashm. not *quinquelineatus* Say p. 61, WELD t.c.—See *Trischiza*; *F. quinquelineatus* see *Xyalophora*.

Hypolethria ramachandrai **sp. n.** India p. 25, MANI Indian J. Ent. **3** 1941.

Liodora viscida p. 5, *apiarium* p. 6, **spp. n.** U.S.A., WELD Proc. U.S. nat. Mus. **95** no. 3178.

Mesocynips albata **sp. n.** Mindanao p. 55 fig., WELD Proc. ent. Soc. Wash. **46**.

Neuroterus argentatus p. 2, *clavensis* p. 3, **spp. n.** U.S.A., WELD Proc. U.S. nat. Mus. **95** no. 3178.

Odonteucoila characters; *gracilicornis* Kieff. from *Coneucoela* p. 63, WELD Proc. ent. Soc. Wash. **46**.

Paramblynotus zonatus **sp. n.** Texas p. 56 fig., WELD t.c.

Paraschiza **gen. n.**, *cupressana* **sp. n.** California p. 58 fig., WELD t.c.

Paraspicera bakeri ♀ p. 57, WELD t.c.

Periclistus confertus see *Ceroptres*.

Phylloteras sigma **sp. n.** U.S.A. p. 5, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Pseudeucoila bochei **sp. n.** U.S.A. p. 65, WELD Proc. ent. Soc. Wash. **46**.

Saphonecrus favanus **sp. n.** U.S.A. p. 1, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Tavaresia floridana see *Figites floridensis*.

Thrasorus **gen. n.**, *pilosus* **sp. n.** N.S. Wales p. 59 fig., WELD Proc. ent. Soc. Wash. **46**.

Trichoteras frondeum **sp. n.** U.S.A. p. 4, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Trigonaspis pulchella Beut. from *Dryophanta* p. 7, WELD t.c.

Trischiza Foerst. (= *Figitodes* Ashm.) p. 61, WELD Proc. ent. Soc. Wash. **46**.

Trybliographa Först. (= *Dimicrostrophis* Ashm.) p. 64, WELD t.c.

Xyalophora quinquelineata Say from *Figitodes* p. 60, WELD t.c.

Zopheroteras cuneatum **sp. n.** U.S.A. p. 14, WELD Proc. U.S. nat. Mus. **95** no. 3178.

Ichneumonoidea.

ICHNEUMONIDAE.

Ichneumonids of Liége, LECLERCQ Ann. Soc. zool. Belg. **74** 1943 pp. 55–61.

A catalogue and reclassification of Nearctic Ichneumoninae, Tryphoninae, Cryptinae, Phaeogeninae and Lissonotinae with much synonymy, TOWNES Mem. Amer. ent. Soc. no. 11 pt. 1 pp. 1–477.

Abanchogastra hawaiiensis Ashm. (= *debilis* Perk.) p. 53 fig., CUSHMAN Proc. Hawaii. ent. Soc. **12.**

Absyrtus Hlmgr. a valid name p. 37, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Agrothereutes Foerst. (= *Gambrus* Foerst., *Spilocryptus* Thoms.), *hospes* Tscheck (= *zygaenarum* Thoms.) p. 32, HINCKS t.c.

Amydraulax echthroides **n. n.** for *brevicornis* Prov. 1886 nec 1875 p. 174, TOWNES Mem. Amer. ent. Soc. no. 11.

Anomalon Jur. discussed p. 35, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Apechoneura (*Paraneura* **subgen. n.** p. 22), MORLEY Revis. Ichneum. pt. 2 1913.

Aptesis Foerst. (= *Pezoporus* Foerst. (preocc.), *Microcryptus* Thoms.) p. 32, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Astomaspis maesticolor see *Haplaspis.*

Atractodes fatuus **n. n.** for *polita* Vier. nec Prov. p. 231; *pacificus* **n. n.** for *americana* Harrington nec Ashm. p. 232, TOWNES Mem. Amer. ent. Soc. no. 11.

Campoctonus orbitalis **sp. n.** Canada, U.S.A. p. 160, WALLEY Canad. Ent. **76.**

Campoplegidea Vier. discussed p. 36, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Campoplex Grav. discussed p. 36, HINCKS t.c.

Christolia dumetorum **n. n.** for *abdominalis* Cushm. 1929 nec 1873 p. 271, TOWNES Mem. Amer. ent. Soc. no. 11.

Cratichneumon ericaeus **n. n.** for *pygmaeus* Davis nec Poda p. 335; *pteridis* **n. n.** for *proximus* Prov. nec Cress. p. 339, TOWNES t.c.

Cteniscus Hal. discussed p. 34, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Cubocephalus annectus **n. n.** for *spissicornis* Prov. 1888 nec 1886 p. 234; *atricornis* **n. n.** for *nigricornis* Prov. 1882 nec 1875 p. 235, TOWNES Mem. Amer. ent. Soc. no. 11.

Diadegma Foerst. discussion of type p. 34, HINCKS t.c.

Diadromus (*Thyraeella*) *collaris* morphology pp. 154–164, 297–301 figs., GIVEN Trans. Proc. R. Soc. N.Z. **74.**

Echthronomas ochreofrons **subsp. n.** *lexiphaga* Canada p. 159, WALLEY Canad. Ent. **76.**

Enicospilus revision of Hawaiian spp. pp. 39–53, key to subgenn. & spp. p. 41; *orbitalis* Ashm. in subgen. *Eremotyloides*; (*Eremotyloides*) *perkinsi* p. 44, (*E.*) *fullawayi* p. 45 **spp. n.** Hawaii; *hawaiiensis, ferrugineus* Perk. from *Pleuroneurophion* p. 46; (*Enicospilus*) *lineatus* Cam. (= *mauicola* Ashm., *dimidiatus* Perk., *capnodes* Perk., *ashmeadi* Perk.) p. 50 figs., CUSHMAN Proc. Hawaii. ent. Soc. **12.**

Eustiphrosomus **n. n.** for *Stiphrosomus* Foerst. nec Fieb. p. 34, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Exochilum see *Therion.*

Gambrus see *Agrothereutes.*

Gelis stricklandi **n. n.** for *ashmeadii* Strickl. nec D.T. p. 202, TOWNES Mem. Amer. ent. Soc. no. 11.

Haplaspis **gen. n.** for *Hemiteles mandibularis* Prov. (type), *Astomaspis maesticolor* Roman p. 190, TOWNES t.c.

Hemiteles mandibularis see *Haplaspis.*

Hymenopharsalia **n. n.** for *Pharsalia* Cress. nec Thoms. p. 97, MORLEY Revis. Ichneum. pt. 2 1913 [? Mar.] p. 97.

Ipoctoninus **n. n.** for *Ipoctonus* Foerst. nec Heine p. 35, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Ipoctonus see *Ipoctoninus.*

Mesoleptidea Vier. discussed p. 33, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Mesoleptus Grav. discussed p. 33, HINCKS t.c.

Mesostenus angustus **n. n.** for *leucopus* Ashm. nec Brullé p. 284, TOWNES Mem. Amer. ent. Soc. no. 11.

Microcryptus see *Aptesis.*

Otlophorinus **gen. n.** for *Otlophorus* Schmied. nec Foerst., *Mesoleius pulverulentus* Hlmgr. designated type p. 35, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Otlophorus Foerst. see *Protarchus*; *O.* Schmied. see *Otlophorinus.*

Paraneura **subgen. n.** see *Apechoneura.*

Pezoporus see *Aptesis.*

Pharsalia see *Hymenopharsalia.*

Phobetellus **n. n.** for *Phobetus* Thoms. nec Lec. p. 34, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Phobetus see *Phobetellus.*

Phygadeuon brevacus **n. n.** for *aciculatus* Prov. 1886 nec 1882 p. 220; *victoriensis* **n. n.** for *canadensis* Harrington nec Prov. p. 226, TOWNES Mem. Amer. ent. Soc. no. 11.

Pimplopterus davisi **n. n.** for *angustus* Davis nec Tasch. p. 452, TOWNES t.c.

Pleuroneurophion hawaiiensis, ferrugineus see *Enicospilus.*

Porizon Fall. (= *Thersilochus* Holmgr.) p. 37, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Prospudaea **n. n.** for *Spudaea* Foerst. nec Snell. (= *Spudaeus* Thoms. nec Gistl nec Dall.) p. 35, HINCKS t.c.

Protarchus Foerst. (= *Otlophorus* Foerst.) p. 35, HINCKS t.c.

Sagaritis see *Sagaritopsis.*

Sagaritopsis **n. n.** for *Sagaritis* Hlmgr. nec Hb. p. 36, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Spilocryptus see *Agrothereutes.*

Spudaea see *Prospudaea.*

Spudaeus see *Prospudaea.*

Spudastica canadensis **sp. n.** Canada p. 157, WALLEY Canad. Ent. **76.**

Stiphrosomus see *Eustiphrosomus.*

Therion Curt. (= *Exochilum* Wesm.) p. 35, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Thersilochus see *Porizon.*

Trychosis semiruber **n. n.** for *annulatus* Prov. nec Cress. p. 254, TOWNES Mem. Amer. ent. Soc. no. 11.

Tryphon davisi **n. n.** for *nigrum* Davis nec Grav. p. 155, TOWNES t.c.

Xenacis Foerst. status discussed p. 33, HINCKS Proc. R. ent. Soc. Lond. (B) **13.**

Xylophrurus atroruber **n. n.** for *purpuripennis* Ashm. nec Cushm. p. 290, TOWNES Mem. Amer. ent. Soc. no. 11.

BRACONIDAE.

Revision of the European Dacnusini [contd.], NIXON Ent. mon. Mag. **80** pp. 88–108, 140 etc. 162 figs.

Adelura see *Dapsilarthra.*

Adelurola see *Dapsilarthra.*

Apanteles discussion of priority of spp. described by Haliday & Nees 1834 pp. 19–20, HINCKS Ent. Rec. **56.**—*A. bruchi* **sp. n.** Argentina p. 153 figs., BLANCHARD Notas Mus. La Plata (Zool.) **6** 1941.—*A. paludicolae* larva p. 61 figs., NARAYANAN Indian J. Ent. **3** 1941.—*A. balteatae* p. 163, *pusaensis* **spp. n.** India; *chilocida* re-description p. 165, LAL Indian J. Ent. **4** 1942.

Atanycolidea see *Atanycolus.*

Atanycolus Foerst. revision of spp. in America north of Mexico pp. 51–163; (= *Atanycolidea* Vier. p. 56); discussion of characters and related genn. p. 58, key to spp. p. 65; *longifemoralis* p. 76, *megophthalmus* p. 80, *melanophili* p. 81, *phaeostethus* p. 83, *niteofrons* p. 84, *longicauda* p. 85, *fuscorbitalis* p. 87, *nigropyga* p. 90, *microstigmatus* p. 93, *calophrys* p. 95, *impressifrons* p. 101, *cryptaspis* p. 103, *parvacavus* p. 109, *comosifrons* p. 111, *latabdominalis* p. 119, *arcasuturalis* p. 121, *crassicruris* p. 124, *octocolae* p. 127, *hicoriae* p. 129, *pilosiventris* p. 131, *tranquebaricae* p. 134, *malii* p. 136, *femoratae* p. 139 U.S.A., *microcellus* p. 89, *lissogastrus* p. 92 Ontario **spp. n.**; *trianguliferus* Vier. from *Iphiaulax* p. 122; *disputabilis* Cress. from *Bracon* p. 141; *rugosiventris* Ashm. (= *Atanycolidea apicalis* Rohw.) p. 149 figs., SHENEFELT Res. Stud. St. Coll. Washington **11** 1943.

Bracon pascuensis **sp. n.** Kansas p. 74, SHENEFELT J. Kans. ent. Soc. **17.**—*B. disputabilis* see *Atanycolus.*

Coeloides Wesm. (= *Coeloidina* Vier.) *scolyticida* Wesm. designated type (replacing *initiator* F.) & gen. reinstated p. 55, SHENEFELT Res. Stud.

St. Coll. Washington **11** 1943.—*C.* Wesm. (= *Coeloidina* Vier.) p. 31, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Coeloidina see *Coeloides*.

Dacnusa keys to spp. pp. 88, 98, 140, 145, 147, 194; *cyparissa* pp. 89, 91, *galba*, pp. 90, 93 Germany, *caelebs* pp. 90, 92, *tamsi* pp. 90, 93, *chrysippe* pp. 89, 94, *didas* p. 144, *alua* p. 146, *bres* p. 252 Br. Isles, *larides* Sweden, Br. Isles pp. 89, 96, *tesmia* Br. Isles, Switzerland, Germany, *calliope* p. 141, *pelion*, *orissa* p. 146, *pione* p. 254 Sweden, *uma* England, Switzerland, *deione* England, Sweden p. 249, *credne* England, Germany, Ireland, Sweden p. 250, *perkinsi* England, Switzerland, Sweden p. 251, **spp. n.**, NIXON Ent. mon. Mag. **80**.

Dapsilarthra Foerst. (= *Adelura* Foerst. preocc., *Adelurola* Strand) p. 31, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Dolops see *Dolopsidea*.

Dolopsidea **n. n.** for *Dolops* Marsh. nec Audouin, nec Agassiz p. 31, HINCKS Proc. R. ent. Soc. Lond. (B) **13**.

Iphiaulax triangulifera see *Atanycolus*.

Microbracon chilonis early stages pp. 5–7 figs., CHERIAN & NARAYANASWAMI Indian J. Ent. **4** 1942.

Microgaster discussion of priority of spp. described by Haliday & Nees 1834 pp. 19–20, HINCKS Ent. Rec. **56**.

Phaenocarpa eunice Hal. (= *nimia* Stelf. ♂) p. 69; *canaliculata* further description; *notabilis* **sp. n.** Ireland p. 234, STELFOX Ent. mon. Mag. **80**.

Rogas notes on some Irish spp. pp. 68–69, STELFOX t.c.—*R. plecopterae* **sp. n.** India p. 213 figs., CHATTERJEE Indian J. Ent. **5** (1943).—*R. testaceus* early stages pp. 191–195 figs., MUZAFFER AHMAD Indian J. Ent. **5** (1943).

APHIDIIDAE.

Revision of Aphidiinae of N. America, SMITH Ohio State Univ. (Contr. Zool. Ent. no. 6) 1944 xii +184 pp. 17 pls.

Acanthocaudus **subgen. n.** (type *tissoti* sp. n.) see *Trioxys*.

Aphidius granarius early stages pp. 259–265 figs., ARTHUR Bull. ent. Res. **35**.—*A.* revision of N. American spp. pp. 34–84 (keys to subgenn. p. 35, spp. pp. 37, 49, 73, 77); (*Xenostigmus* **subgen. n.** p. 36); (*Protaphidius*) *bicolor* Ashm. (= *pinaphidis* Ashm.) p. 39; (*P.*) *scorpinicus* p. 45, (*P.*) *takomaensis* p. 46, (*P.*) *varigatus* p. 47, (*P.*) *xanthotherus* p. 48, (*A.*) *berberidis* p. 54, (*A.*) *floridaensis* p. 56, (*A.*) *kakimiaphidis* p. 58, (*A.*) *nigriteleus* p. 61, (*A.*) *ohioensis* p. 63, (*Lysaphidus* **subgen. n.** p. 72), (*L.*) *adelocarinus* p. 73, (*L.*) *ramithyrus*, (*L.*) *rosaphidis* p. 75, (*Lysiphlebus*) *chrysoaphidis* p. 78, (*L.*) *knowltoni* p. 80, (*L.*) *utahensis* p. 83 **spp. n.** U.S.A.; *avenaphis* Fitch (= *xanthus* Ashm.) p. 53; *obscuripes* Ashm. a valid sp. p. 62; (*Aphidius*) *pterocommae* Ashm. (= *lachni* Ashm.) p. 68; *Lysiphlebus* a subgen. pp. 8, 76 figs., SMITH Aphidiinae N. Amer.

Diaeretus revision of N. American spp. pp. 98–102 (key p. 99) figs., SMITH t.c.

Dyscritulus planiceps ♂, cocoon p. 94 fig., HINCKS Naturalist no. 810.

Ephedrus revision of N. American spp. pp. 15–21 (key p. 16); *californicus* Bak. (= *nevadensis* Bak., *nigricornis* Gah.) p. 17; *muesebecki* **sp. n.** Washington p. 20 figs., SMITH Aphidiinae N. Amer.—*E. minor* a valid sp. p. 235, STELFOX Ent. mon. Mag. **80**.

Lysaphidus **subgen. n.** (type *adelocarinus* sp. n.) see *Aphidius*.

Lysiphlebus a subgen. of *Aphidius*, q.v.

Praon revision of N. American spp. p. 22–32 (key p. 22); *aguti* p. 23, *artemisaphis* p. 26, *negundinis* p. 27, *unicus* p. 30 **spp. n.** U.S.A.; *simulans* Prov. (= *pequodorum* Vier.) p. 29 figs., SMITH Aphidiinae N. Amer.

Trioxys key to spp. of N. America pp. 85, 98; (*T.*) *ameraceris* p. 87, (*T.*) *bonnevillensis* p. 88, (*T.*) *carolinensis* p. 89, (*T.*) *gahani* p. 92, (*T.*) *infrequens* p. 93, (*T.*) *palmerae* p. 94, (*Acanthocaudus* **subgen. n.**) (*A.*) *tissoti* p. 96, (*A.*) *caudacanthus* p. 97 **spp. n.** U.S.A. figs., SMITH t.c.

Xenostigmus **subgen. n.** (type *bifasciatus* Ashm.) see *Aphidius*.

EVANIIDAE.

Indian Evaniids, MANI & MUZAFFER AHMAD Indian J. Ent. **5** (1943) pp. 1–28, 11 figs.

Brachygaster bidentata ♀ p. 2 fig., MANI & MUZAFFER AHMAD t.c.

Evania key to Indian spp. p. 8, *nongpohensis* (MUZAFFER) p. 9, *pandai* (MUZAFFER) p. 10, *euerythrothorax* (MANI) p. 11, *parerythrothorax* (MUZAFFER) p. 12, *mukerjii* (MANI) p. 13, *hunteri* (MANI) p. 14, *mackenziei* (MUZAFFER) p. 15, *fletcheri* (MUZAFFER) p. 16, *sidapurensis* (MUZAFFER) p. 17, **spp. n.** India figs., MANI & MUZAFFER AHMAD t.c.

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Parevania kasauliensis **sp. n.** India p. 3 fig., MUZAFFER AHMAD t.c.

Pristaulacus nigripes Kieff. (= *beesoni* Turner) p. 27; *iridipennis* ♀ p. 28, MANI & MUZAFFER AHMAD t.c.

Prosevania palniensis (MUZAFFER) S. India p. 5, *pyrhosomoides* (MANI) Burma p. 6, **spp. n.** India figs., MANI & MUZAFFER AHMAD t.c.

Trichofoenus key to Indian spp. p. 19; *quadridentatus* p. 20, *inglisi*, *chapraensis* p. 21, *aspera* p. 22, **spp. n.** India figs., MANI t.c.

Trigonofoenus shillongensis **sp. n.** Assam p. 18 fig., MUZAFFER AHMAD t.c.

Tenthredinoidea.

Xyelidae of France, BERLAND Bull. Soc. ent. Fr. **48** 1943 pp. 89–92, 1 fig.

Tenthredinoidea of S.E. Asia and of Swedish Expedition 1934 to Burma and British India, MALAISE Ark. Zool. **35A** no. 10, 58 pp. 19 figs.

Abusarbia **gen. n.**, *shanibia* **sp. n.** (type) Burmese Shan States p. 25, *formosibia* Formosa **spp. n.**; *japonica* Mal. from *Anapeptamena* p. 26, MALAISE Ark. Zool. **35A** no. 10.

Alloselandria **gen. n.**, *indo-birmana* **sp. n.** Calcutta, Burma p. 20 fig., MALAISE t.c.

Anapeptamena japonica see *Abusarbia*.

Aneugmenus key to Oriental spp. *pteridii* p. 6, *verticinus* p. 7 **spp. n.** Burma, MALAISE Ark. Zool. **35A** no. 10.

Apeptamena **gen. n.**, *birmanica* **sp. n.** Burma-Yunnan frontier p. 21 fig., MALAISE t.c.

Arbusia **gen. n.** for *Stromboceros koebele* Rohw. p. 22, MALAISE Ark. Zool. **35A** no. 10.

Birka **gen. n.** for *Tenthredo cinereipes* Klug p. 4, MALAISE t.c.

Bocerus **gen. n.** for *Stromboceros phaleratus* Konow (type); *sinensis* **sp. n.** China p. 47, MALAISE t.c.

Bornea **gen. n.** for *Stromboceros pictipennis* Konow p. 46, MALAISE t.c.

Busarbia a valid gen. pp. 10, 19, key to spp.; *albipes* Cam. a colour form of *viridipes* Cam. p. 19 fig., MALAISE t.c.

Busarbidea Rohw. (= *Canoniades* Fors.) p. 22, key to spp. p. 23; *luchti* Java, *albilabris*, *orinigra* Burma, *unitarum* Himalayas **spp. n.** p. 24 figs., MALAISE t.c.

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Claguea **gen. n.**, *shanensis* **sp. n.** Shan States p. 56 fig., MALAISE Ark. Zool. **35A** no. 10.

Concavicornia **gen. n.** p. 54, *nana* **sp. n.** Burma p. 55 fig., MALAISE t.c.

Corrugia **subgen. n.** (type *sulciceps* sp. n.) see *Nesoselandria*.

Cubitella **gen. n.** p. 57, *antennata* **sp. n.** possibly China p. 58 fig., MALAISE Ark. Zool. **35A** no. 10.

Denticornia **gen. n.** for *Stromboceros sikkimensis* Mal. (type) p. 51; (*Edenticornia* **subgen. n.**), (*D.*) *brunneicornis*, (*E.*) *birmana* Burma p. 53, (*E.*) *formosana* Formosa p. 54 **spp. n.** figs., MALAISE t.c.

Duplunguis **gen. n.** p. 50, *sinobirmanica* **sp. n.** Burma p. 51 fig., MALAISE t.c.

Edenticornia **subgen. n.** (type *birmana* sp. n.) see *Denticornia*.

Euforsius **gen. n.** for *Stromboceridea jacobsoni* Fors. p. 55 fig., MALAISE Ark. Zool. **35A** no. 10.

Formosibia **gen. n.** for *Stromboceros atratus* Ensl. (with f. *leucopoda* Rohw. from *Neostromboceros*) p. 10, MALAISE t.c.

Hemibia nom. nud. p. 1, SEMENOV-TIAN-SHANSKIĬ & GUSSAKOVSKIĬ Konowia **16** 1937.—See *Orientabia*.

Hoplocampa revision of N. American spp. pp. 61–92, key to spp. p. 64; *sialica* p. 67, *makila*, *texas* p. 68, *oskina* p. 71, *ritcheri* p. 72, *idaho* p. 81, *nalema* p. 82 U.S.A., *stricklandi* (also Michigan) p. 73, *neneti* p. 77, *spala* (also Oregon) p. 83 Canada **spp. n.**; *bioculata* Rohw. (= *koebelei* Rohw., *padusa* MacG.) p. 69; *halcyon* Nort. (= *xantha* Rohw.) p. 74; *montanicola* Rohw. (= *orbitalis* Rohw., *occidentalis* Rohw.) p. 87; *pallipes* ♂♀ p. 76 figs., ROSS Trans. Amer. ent. Soc. **69** 1943.

Iconia **gen. n.** p. 48, *versicolor* **sp. n.** Assam, Burma p. 49 fig., MALAISE Ark. Zool. **35A** no. 10.

Kulia **gen. n.** for *Stromboceros sinensis* Fors. p. 48 fig., MALAISE t.c.

Neobusarbia see *Nesoselandria*.

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Sphingognatha pallida see *Tagora*.

Tagora pallida Wlk. from *Sphingognatha*; *nobilis* **sp. n.** S. Shan States p. 23 (with **subsp. n.** *insulindica* Java p. 24) figs., BRYK t.c.

THYATIRIDAE (CYMATOPHORIDAE).

Thyatiridae of Swedish Expedition 1934 to Burma and Br. India, BRYK Ark. Zool. **34A** 1943 no. 11 pp. 1–16, 2 pls. 1 map.

Chaeopsestis **gen. n.**, *ludovicae* **sp. n.** Tonkin p. 94 figs., Le Cerf Bull. Soc. ent. Fr. **46** 1941.

Gaurena florens **f. n.** *oliva* Burma; *olivacea* ♀ p. 10, Bryk Ark. Zool. **34A** 1943 no. 11.

Habrosyne indica **subsp. n.** *malaisei* Burma p. 6 fig., Bryk t.c.—*H. argenteipuncta* see *Habrosynula*.

Habrosynula **gen. n.** for *Habrosyne argenteipuncta* Hamps. p. 6 fig., Bryk Ark. Zool. **34A** 1943 no. 11.

Haplothyatira unipunctata **subsp. n.** *dubitatrix* Burma p. 13 fig., Bryk t.c.

Mimopsestis determinata **sp. n.** Burma p. 12 figs., Bryk t.c.

Palimpsestis griseocostata Gaede a subsp. of *subampliata* p. 11; *ro-album* **sp. n.** Burma p. 12 figs., Bryk t.c.

Psidopala ebba **sp. n.** Burma p. 7 fig., Bryk t.c.

Saronaga oberthüri **subsp. n.** *monticola* p. 3; *commifera* **subsp. n.** *aurisigna* p. 4 Burma figs., Bryk t.c.

Tethea (*Palimpsestis*) *ocularis* **ab. n.** *fusca* England p. 53, Cockayne Ent. Rec. **56**.

Toxoides emphloius Burma p. 15 fig., Bryk Ark. Zool. **34A** 1943 no. 11.

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Key to larvae of Indian Notodontidae, Gardner Indian J. Ent. **5** (1943) p. 90.

Cerura larva p. 98, Gardner Indian J. Ent. **5** (1943).—*C. annulifera* larva p. 35 figs., Schreiter Acta zool. lilloana **1** 1943.—*C. bicuspis* **ab. n.** *insignis* England p. 53, Cockayne Ent. Rec. **56**.

Clostera pigra **ab. n.** *alba* locality unknown p. 53, Cockayne t.c.

Crinodes nebulosa early stages p. 36 figs., Schreiter Acta zool. lilloana **1** 1943.

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Epicoma barnardi ♀ p. 61, Turner Proc. roy. Soc. Qd **53** (1941) 1942.

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Gargetta costigera, ingens, curvaria larvae p. 94 figs., Gardner Indian J. Ent. **5** (1943).

Gazalina apsara larva p. 92, Gardner t.c.

Leucodonta bicoloria colour inheritance pp. 313–318 fig., Suomalainen Hereditas **27** 1941.

Lirimiris lignitecta larva p. 37 figs., Schreiter Acta zool. lilloana **1** 1943.

Neopheosia excurvata larva p. 93, Gardner Indian J. Ent. **5** (1943).

Notodonta sp. larva p. 97, Gardner t.c.

Phalera sangana stigmigera larva p. 96, Gardner t.c.

Pseudofentonia sp. larva p. 99, Gardner t.c.

Pterostoma palpina **ab. n.** *fasciata* locality unknown p. 53, Cockayne Ent. Rec. **56**.

Pygaera anachoreta **subsp. n.** *lundqvisti* Sweden p. 106, Bryk Opusc. ent. Lund **7** 1942.—*P. fulgurita, cupreata, restitura* larvae p. 92, Gardner Indian J. Ent. **5** (1943).

Spataloides argentifera larva p. 97, Gardner t.c.

Stauropus alternus larva p. 97, Gardner t.c.

Stenodonta radialis larva p. 96, Gardner t.c.

Teleclita strigata larva p. 93 fig., Gardner t.c.

Thaumetopoea cheela larva p. 91 fig., Gardner t.c.

GEOMETRIDAE (OENOCHROMIDAE).

Aepylopha **gen. n.** (nr. *Chloroclystis*), *thalassia* **sp. n.** N. Queensland p. 62, Turner Proc. roy. Soc. Qd **53** (1941) 1942.

Aglossophanes **gen. n.** for *Taxeotis pachygramma* Turn. (type); *adoxima* **sp. n.** Queensland p. 71, Turner t.c.

Amblychia subrubida Warr. (= *Elphos hypocallistis* Low.) p. 193, Goldfinch Proc. Linn. Soc. N.S.W. **69**.

Amelora Meyr. (= *Angelia* Low.) p. 194, Goldfinch t.c.

Angelia see *Amelora*; *A. heteropa* see *Loweria*.

Anisographe dissimilis Warr. (= *Orsonoba euryscopa* Low.) p. 189, Goldfinch Proc. Linn. Soc. N.S.W. **69**.

Anochthera **gen. n.** (Boarmiidae), *indistincta* **sp. n.** Australia p. 196, GOLDFINCH t.c.

Authaemon purpurea **sp. n.** Australia p. 194, GOLDFINCH t.c.

Besma quercivoraria, endropiaria early stages p. 330 figs., RUPERT J. N.Y. ent. Soc. **52.**

Boarmia corticola p. 192, *driophila* **spp. n.** Australia; *lithina* Warr. (= *eudela* Turn.) p. 193, GOLDFINCH Proc. Linn. Soc. N.S.W. **69.**—*B. ghirshmani* **sp. n.** Iran p. 98; *tenuisaria* larva p. 114 figs., WILTSHIRE Ent. Rec. **56.**

Cenochlora quieta Luc. (= *quantilla* Turn.) p. 69, TURNER Proc. roy. Soc. Qd **53** (1941) 1942.

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Ectropis calida p. 189, *lignea* p. 190, **spp. n.** Australia, GOLDFINCH t.c.

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Eois iodesma Meyr. (? = *perdulcis* Turn.); *delosticta* ♂; *lucida* **sp. n.** Queensland p. 66, TURNER Proc. roy. Soc. Qd **53** (1941) 1942.

Euloxia meracula **sp. n.** S. Australia p. 69, TURNER t.c.

Euphyia conifasciata **rr. n.** *tasmaniensis* Tasmania, *occidentalis* W. Australia; *trissophrica* Turn. (= *leptophrica* Turn.) p. 65; *ptochopis* Turn. (= *trissocyma* Turn.); *actinipha* Low. (= *epicteta* Turn.) p. 66, TURNER t.c.

Eupithecia notes on *palpata* group pp. 45–47; *carolata, castellata* p. 47, *terrestrata* p. 48, *catalinata* p. 50, *chiricahuata* p. 51, *owenata* p. 52, *sabulosata* p. 55, *macrocarpata* p. 56, **spp. n.** U.S.A., MCDUNNOUGH Canad. Ent. **76.**—*E. virgaureata, distinctaria* compared p. 132, HOFFMEYER Flora og Fauna **49** 1943.—*E. venosata* **r. n.** *hebridensis* Isle of Lewis, Hebrides; *tripunctaria* aberrant ♀ p. 169, CURTIS J. Soc. Br. Ent. **2.**

Eutane middletoni **sp. n.** N.S. Wales p. 72, TURNER Proc. roy. Soc. Qd **53** (1941) 1942.

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Hydriomena gracillima **sp. n.** Arizona p. 173; genitalia of spp. of *ruberata* group pp. 206–210; *r.* **var. n.** *pallula* p. 207; *feminata* **sp. n.** p. 208 California; *modestata* B. & McD. a race of *chiricahuata* and not *bistriolata* p. 208; *nevadae* B. & McD. a distinct sp. p. 210 figs., MCDUNNOUGH Canad. Ent. **76.**—*H. crocota* see *Xanthorhoe.*

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Loweria **gen. n.** for *Angelia heteropa* Low. p. 194, GOLDFINCH Proc. Linn. Soc. N.S.W. **69.**

Megazancla **gen. n.** (Boarmiidae), *cinerea* **sp. n.** W. Australia p. 195, GOLDFINCH t.c.

Melanolophia signataria p. 124, *canadaria* p. 125, *imitata* p. 126 larvae figs., MCGUFFIN Canad. Ent. **76.**

Microdes decora **sp. n.** S. Australia; *leptobrya* Turn. (= *phricocrossa* Turn.) p. 65, TURNER Proc. roy. Soc. Qd **53** (1941) 1942.

Narraga nelvae **subspp. n.** *catalaunica* Spain p. 83, *cappadocica* Caesarea, Asia Minor p. 84, HERBULOT Bull. Soc. ent. Fr. **48** 1943.

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Nyctilampes **gen. n.** (Boarmiidae), *funerea* **sp. n.** Australia p. 196, GOLDFINCH t.c.

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Poliodule melanotricha **sp. n.** W. Australia p. 72, TURNER t.c.

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SATURNIIDAE.

Saturniidae of Swedish Expedition 1934 to Burma and British India, BRYK Ark. Zool. **35A** no. 8 pp. 1–16 figs.

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Actias selene **subsp. n.** *malaisei* S. Shan States p. 3, BRYK Ark. Zool. **35A** no. 8.

Antheraea assamensis **subsp. n.** *mezops* Burma p. 7 fig., BRYK t.c.

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Automeris viridescens p. 5 (1940), *grammivora* p. 11 (1941), *coresus* p. 17 (1941), *aspera* p. 35 (1942) early stages, figs., BOURQUIN Charlas observ. ent. —*A. incarnata cecrops* **f. n.** *herse*; *maeonia* **subsp. n.** *adusta* p. 197; *leucane* **f. n.** *cinnamomea*; *adelon* **sp. n.** p. 198 Mexico, HOFFMANN An. Inst. Biol. Mexico **13** 1942.—*A. stuarti* subsp.

köhleri p. 22, *amanda* p. 23, *aspersa* p. 24, *incisa*, *naranja* p. 25, *oberthurii* p. 26 early stages figs., SCHREITER Acta zool. lilloana **1** 1943.

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Cricula andrei **subsp. n.** *jordani* Burma p. 4 fig., BRYK Ark. Zool. **35A** no. 8.

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Oxytenis affinis **sp. n.** Mexico p. 203, HOFFMANN An. Inst. Biol. Mexico **13** 1942.

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Adelocephala albolineata **ab. n.** *mendizabali* Mexico p. 201, HOFFMANN An. Inst. Biol. Mexico **13** 1942.

Adeloneivaia grisescens **sp. n.** Mexico p. 201 fig., HOFFMANN t.c.

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Citheronia splendens **subsp. n.** *sinaloensis* Mexico p. 202 fig., HOFFMANN An. Inst. Biol. Mexico **13** 1942.—*C. vogieri* early stages p. 33 figs., SCHREITER Acta zool. lilloana **1** 1943.

Dysdaemonia timur (Weymer MS.) **sp. n.** Colombia, Amazonas p. 1 figs., OITICICA Bol. Mus. nac. Rio de J. (N.S.) Zool. no. 14.

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Eurukuttarus confederata internal genitalia pp. 251–260 figs., WILLIAMS J. Morph. **75**.

Hyaloscotes sheppardi **sp. n.** Quebec p. 186 figs., FREEMAN Canad. Ent. **76**.

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Nomenclatorial notes on and types of Uraniid genera, FERREIRA D'ALMEIDA Arq. Mus. paranaense **3** 1943 pp. 135–136.

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Micronia pluviosa **subsp. n.** *renéi* S. Shan States p. 32 fig., BRYK Ark. Zool **35A** no. 8.

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Sympycnodes rhaptodes **sp. n.** N.S. Wales p. 80, TURNER Proc. roy. Soc. Qd **53** (1941) 1942.

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Nomenclatorial notes on and types of Lasiocampid genera, FERREIRA D'ALMEIDA Arq. Mus. paranaense **3** 1943 pp. 132–133.

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On the types of genera of Mimallonidae, FERREIRA D'ALMEIDA Bol. Mus. nac. Rio de J. (N.S.) Zool. no. 10 1943 6 pp.

Nomenclatorial notes on and types of Mimallonid genera, FERREIRA D'ALMEIDA Arq. Mus. paranaense **3** 1943 pp. 134–135.

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Hydropsyche Pict. *cinerea* Pict. designated type, key p. 86; *piatrix* p. 97, *dicantha* p. 102 ♀♀; *solex* **sp. n.** Texas p. 271 figs., Ross t.c.—*H. wittei* **sp. n.** Belg. Congo p. 8 figs., Marlier Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 44 1943.—*H. bwambana* nymph p. 20 fig., Marlier Expl. Parc nat. Albert, Miss. H. Damas (1935–36) fasc. 11 1943.

Hydroptila sp. larva p. 29, Marlier t.c.—*H.* Dalm. (= *Phrixocoma* Eat.) p. 141; *waskesia* **sp. n.** Saskatchewan p. 276 figs., Ross Bull. Ill. n. H. Surv. **23.**

Ithytrichia mazon **sp. n.** Illinois p. 124, Ross t.c.

Jenortha see *Lepidostoma.*

Leiochiton see *Tricholeiochiton.*

Lepidostoma Ramb. *squamulosum* Ramb. designated type (= *Pristosilo* Banks, *Atomyia* Banks, *Notiopsyche* Banks, *Mormomyia* Banks, *Alepomyia* Banks, *Phanopsyche* Banks, *Alepomyiodes* Sibley, *Arcadopsyche* Banks, *Oligopsyche* Carp., *Neuropsyche* Carp., *Jenortha* Milne) p. 258 figs., Ross Bull. Ill. n. H. Surv. **23.**

Leptocella diarina p. 218, *spiloma* p. 219, *tavara* p. 287, **spp. n.** U.S.A. figs., Ross t.c.

Leptocerus quartus **sp. n.** Belg. Congo p. 7 figs., MARLIER Expl. Parc nat. Albert, Miss. H. Damas (1935–36) fasc. 11 1943.

Leucotrichia notosa p. 271, *limpia* p. 273, *sarita* p. 274, **spp. n.** U.S.A. figs., Ross Bull. Ill. n. H. Surv. **23.**

Limnephilus sericeus Say (= *despectus* Wlk., *multifarius* Wlk., *perforatus* Wlk., *eminens* Bett.) p. 192; *nogus* Br. Columbia, U.S.A. p. 281, *frijole* U.S.A. p. 282 **spp. n.** figs., Ross t.c.—*L. indicans* see *Platycentropus radiatus*; *praeteritus* see *Grensia.*

Loxotrichia see *Oxyethira.*

Lype McL. *phaeopa* Steph. designated type; *diversa* Banks (= *griselda* Bett.) p. 74 figs., Ross Bull. Ill. n. H. Surv. **23.**

Mayatrichia ponta p. 278, *acuna* p. 279, **spp. n.** U.S.A. figs., Ross t.c.

Micrasema McL. *morosum* McL. designated type p. 261 fig., Ross t.c.

Mormomyia see *Lepidostoma.*

Mystacides Berth. *longicornis* L. designated type p. 253, Ross Bull. Ill. n. H. Surv. **23.**

Mystrophora see *Glossosoma* and *Mystrophorella.*

Mystrophorella **n. n.** for *Mystrophora* Klap. nec Kayser p. 97, KLOET & HINCKS Entomologist **77.**—Cf. *Glossosoma.*

Neotrichia sonora p. 277, *osmena* p. 278, **spp. n.** U.S.A. figs., Ross Bull. Ill. n. H. Surv. **23.**

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Neuropsyche see *Lepidostoma.*

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Nyctiophylax orientalis **sp. n.** Belg. Congo p. 21 figs., MARLIER Expl. Parc nat. Albert, Miss. H. Damas (1935–36) fasc. 11 1943.—*N. uncus* **sp. n.** U.S.A. p. 70, Ross Bull. Ill. n. H. Surv. **23.**

Ochrotrichia Mosely (= *Polytrichia* Sibl. preocc.) p. 125, key p. 126; *riesi* p. 132, *weddleae* p. 274, *capitana*, *felipe* p. 275 **spp. n.** U.S.A. figs., Ross t.c.

Oecetis McL. *ochraceus* Curt. designated type p. 236; *ochracea* Curt. (= *carri* Milne) p. 244 figs., Ross t.c.—*O.* sp. nymph p. 10, MARLIER Expl. Parc nat. Albert, Miss. H. Damas (1935–36) fasc. 11 1943.—*O. anomala* **sp. n.** Belg. Congo p. 8 figs., MARLIER Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 44 1943.

Oligophlebodes sierra p. 284, *ruthae* p. 285, **spp. n.** U.S.A. figs., Ross Bull. Ill. n. H. Surv. **23.**

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Orthotrichia Eaton *angustella* McL. designated type p. 139; *americana* Banks (= *Oxyethira dorsalis* Banks) p. 140 figs., Ross Bull. Ill. n. H. Surv. **23.**—*O. damasi* **sp. n.** Belg. Congo p. 31 fig., MARLIER Expl. Parc nat. Albert, Miss. H. Damas (1935–36) fasc. 11 1943.

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Parapatania **gen. n.** for *Phryganea stigmatella* Zett. p. 95, FORSSLUND Opusc. ent. Lund **7** 1942.

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Phryganea stigmatella see *Parapatania.*

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Polyplectropus africanus **sp. n.** Belg. Congo p. 13 figs., MARLIER Expl. Parc nat. Albert, Miss. de Witte (1933–35) fasc. 44 1943.

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Psychoglypha **gen. n.** for *Glyphopsyche avigo* Ross p. 201, Ross t.c.

Psychomyia Pict. *annulicornis* Pict. designated type p. 75 figs., Ross t.c.

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Tascobia **gen. n.** for *Stactobia palmata* Ross (type), *brustia* Ross, *delira* Ross p. 124 figs., Ross Bull. Ill. n. H. Surv. **23**.

Triaenodes McL. *bicolor* Curt. designated type p. 244; *tarda* Milne (= *vorhiesi* Bett., *mephita* Milne) p. 250; *ignita* Wlk. (= *dentata* Banks) p. 252 figs., Ross t.c.

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Navasoleon **gen. n.** for *Gymnocnemia boliviana* Banks p. 168, Banks Bol. Ent. venez. **2** 1943.

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n. n. for *montanum* End. nec Phil. p. 132; *pseudohirtipes* **n. n.** for *nigripes* End. nec Abreu; *meunieri* **n. n.** for *affinis* Meun. nec Steph.; *baracorne* **n. n.** for *ruficorne* Baran. nec Macq.; *nacojapi* **n. n.** for *japonica* Shir. nec Mats.; *figueroa* **n. n.** for *simile* Silva Figueroa nec Mall.; *austrosimile* **n. n.** for *simile* Tonn. nec Silva Fig.; *jerichoensis* **n. n.** for *flavipes* Aust. nec Steph. p. 133; *irakae* **n. n.** for *bipunctatum* Aust. nec Mall.; *pertinax* Koll. (= *lutziana* End. preocc. by Pinto); *trivittatum* Mall. (= *distinctum* Mall. preocc. by Lutz); *chiliarum* Phil. (date of pub. 1863), *chilense* Phil. status discussed p. 134, SMART Proc. R. ent. Soc. Lond. (B) **13.**

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Catacores **gen. n.** for *Axona cyanea* Brun. p. 205, HULL Ent. News **55**.

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Conosyrphus see *Syrphella.*

Crepidomyia darlingtoni **sp. n.** Cuba p. 40, HULL Psyche **51.**

Criorhina pallipilosa p. 34, *bomboides* p. 37 India, *crioarctos* Burma p. 36, **spp. n.**, HULL Ann. Mag. n. H. (11) **11.**

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Dasyepistrophe Szil. *macularis* Zett. designated type p. 136, GOFFE Entomologist **77.**—See *Mesosyrphus.*

Dexiosyrphus **subgen. n.** (type *funeralis* sp. n.) see *Spheginobaccha.*

Elophila see *Tubifera.*

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Eumenos Mg. (= *Syritta* Lep. & Serv.) validity discussed p. 130, GOFFE Ent. mon. Mag. **80.**

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Eumerus Mg. 1804 see *Zelima*; of Mg. 1822 see *Paragopsis.*

Eurimyia see *Anasimyia.*

Euryepistrophe Szil. *grossulariae* Mg. designated type p. 136, GOFFE Entomologist **77.**—See *Epistrophe.*

Gymnochilosia see *Cartosyrphus.*

Habromyia floccula **sp. n.** Peru p. 47, HULL Rev. Ent. Rio de J. **15.**

Heliophilus see *Zelima.*

Helophila see *Tubifera.*

Helophilus F. (= *Helophilus* Mg. nec Leach) *pendulus* L. designated type p. 115, GOFFE Ent. mon. Mag. **80.**—See *Tubifera.*

Heringia see *Phalangus.*

Heterepistrophe Szil. *balteata* Deg designated type p. 136, GOFFE Entomologist **77.**—See *Episyrphus.*

Hiatomyia see *Cartosyrphus.*

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Lejogaster see *Sulcatella.*

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brunnipennis Guatemala p. 400, HULL J. Wash. Acad. Sci. **34**.—*M. aureomagnifica* Belg. Congo p. 242, *aurifascia* Brazil p. 245, *tabanoides* Australia p. 246, *petiolata* p. 248, *pictulipennis* p. 249 Tasmania, *modesticolor* S. Africa p. 251, *albofascia* N. Burma p. 253, *bicolorata* Sumbawa p. 254, *sulcata* p. 256, *aurilinea* p. 258, *fumipennis* p. 259 Java **spp. n.**; *flavipennis* **var. n.** *nigrita* Mindanao p. 257, HULL Ann. Mag. n. H. (11) **11**.

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Cuphoceropsis andina p. 138, *subandina* p. 140, **spp. n.** Argentina fig., BLANCHARD t.c.

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Marshamia see *Bonnetia.*

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Orthosia **gen. n.** (nr. *Microchaetina*) p. 60, *montana* (type) p. 61, *palaga* p. 62 **spp. n.** California, REINHARD t.c.—See *Orthosimyia*.

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Gallipeurus heterographus early stages p. 136, ATIQUR RAHMAN ANSARI Indian J. Ent. **5** (1943).

Gliricola panamensis (on *Sigmodon hispidus chiriquensis, Proechimys centralis chiriquinus*) Panama, *columbanus* (on *P. mincae*) p. 393, *capromydis* (on *Capromys pilorides, prehensilis*) p. 394 (with **subsp. n.** *armatus* (on *C. prehensilis*) p. 397), *cubanus* (on *C. pilorides*) p. 397, *ewingi* (on *C. prehensilis*) p. 399 Cuba **spp. n.** figs., WERNECK Rev. brasil. Biol. **4**.

Gonioocotacanthus see *Physconelloides*.

Heleonomus miandrius Kell. (= *confusus* Ferr.) p. 226, HOPKINS Ann. Mag. n. H. (11) **11**.

Heptagoniodes Carr. (= *Lepidophorus* Tasch. p. 208) emended characters p. 207 ; *dimorphus* **sp. n.** (on *Tinamus tao weddelli*) Bolivia p. 210 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Heptapsogaster mandibularis **subspp. n.** *modestae* (on *Crypturellus b. boucardi*) p. 141, *tapicollae* (on *C. soui meserythrus*) p. 143 Mexico, *garleppi* (on *C. garleppi affinis*) p. 145, *crucis* (on *C. obsoletus crucis*) p. 148 Bolivia, *yapurae* (on *C. undulatus yapura*), *nigriceps* (on *C. soui nigriceps*) Peru p. 147, *idoneus* (on *C. idoneus*) p. 149, *motilonensis* (on *C. soui*) p. 151 Colombia ; *inexpectata* **sp. n.** (= *stultus* Clay ♀) [? Argentina] p. 151 (with **subspp. n.** *tuxtlae* (on *C. b. boucardi*) Mexico p. 153, *undulata* (on *C. u. undulatus*), *benii* (on *C. soui inconspicuus*) Bolivia p. 155, *magdalenae* (on *C. idoneus*) Colombia p. 156) ; *temporalis* **subspp. n.** *boucardi* (on *C. b.*

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Heptapsus nothocercae corrected description p. 194; *inexpectatus* **sp. n.** (on *Nothocercus bonaparti*) Colombia p. 195 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Heptarthrogaster minutus **subsp. n.** *mexicanus* (on *Tinamus major percautus*) Mexico p. 177; *latacephalus* (on *Crypturellus u. undulatus*) Bolivia p. 180, *costaricensis* (on *C. soui modestus*) Costa Rica p. 182 **spp. n.**; *grandis* ♂ p. 183 figs., CARRIKER t.c.

Heteropeostus **gen. n.** for *Rhyncothura carrikeri* Clay p. 175 figs., CARRIKER t.c.

Hypocrypturellus coniceps **subspp. n.** *idoneus* (on *Crypturellus idoneus*) Colombia, *boucardi* (on *C. b. boucardi*) Mexico p. 226 figs., CARRIKER t.c.

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Laemobothrion revision; *anatolicum* (on *Falco subbuteo*), *niethammeri* (on *Buteo ferox*) Asia Minor, *hoeschi* (on *Aquila verreauxi*) S. Africa **spp. n.** in pp. 52–63 figs., EICHLER Zool. Anz. **137** 1942 [not seen].

Lepidophorus Tasch. *Goniocotes agonus* Nitzsch designated type p. 208, CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.—See *Heptagoniodes*.

Lipeurus crotophagae see *Vernonia macgregori*; *clavatus* see *Epicolinus*; *forcipatus* see *Splendoroffula*.

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Megaginus emarginatus **subspp. n.** *lataclypeus* (on *Crypturellus soui meserythrus*) Mexico p. 124, *excavatus* (on *C. s. inconspicuus*) Bolivia p. 126, *dissimilis* (on *C. s. nigriceps*) Peru p. 127 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Megapeostus barvigenitalis Carr. p. 185, *secundus* Clay pp. 185, 189 raised to specific rank; *multiplex* **subsp. n.** *idoneus* (on *Crypturellus idoneus*) Colombia p. 188 figs., CARRIKER t.c.

Menacanthus nothoproctae **sp. n.** (on *Nothoprocta cinerascens*) Bolivia p. 84 figs., CARRIKER t.c.

Menopon crucis re-description p. 36 figs., STAFFORD Bol. Ent. venezol. **2** 1943.—*M. decoratum, hirsutum* see *Cuculiphilus fasciatus*.

Myrsidea rustica Nitzsch (= *dissimile* Kllg., *latifrons* Carr. & Shull); *diffusa* Kllg. (= *fuscomarginatum* Osb., *bonariensis* Malc.) p. 40; *magnidens* **sp. n.** (on *Pitangus sulfuratus rufipennis*) Venezuela p. 41 figs., STAFFORD Bol. Ent. venezol. **2** 1943.

Nothocotus subsimilis Carr. a subsp. of *parvithorax* Carr. p. 133 fig., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Ornicholax Carr. status discussed p. 208; *alienus* Gieb. discussed p. 211 (with **subspp. n.** *mexicanus* (on *Tinamus major percautus*) Mexico, *boliviensis* (on *T. s. serratus*) Bolivia p. 215) figs., CARRIKER t.c.

Oxylipeurus Neotropical spp. pp. 557–585; *rhynchoti* ♀ p. 562; *craxae* (on *Crax alberti*) p. 563 (with **subsp. n.** *annulatus* (on *C. annulata* p. 565)), *pauxus* (on *Pauxis pauxi illiardi*) p. 567, *sinemammula* (on *Penelope purpurascens brunnescens*) p. 571, *tenuicapitis* (on *Ortalis ruficrissa*) p. 581, *garrulae* (on *O. g. garrula*) p. 582 Colombia, *globicerus* (on *C. r. rubra*) Mexico p. 566, *bridgesi* (on *Penelope obscura bridgesi*) p. 569, *quinimammula* (on *P. montagnii sclateri*) p. 570 Bolivia,

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Parayoniocotes venezolanus (on *Casicus c. cela*) **sp. n.** Venezuela p. 55 figs., STAFFORD Bol. Ent. venezol. **2** 1943.

Parricola exiguifrons **sp. n.** (on *Jacana spinosa gymnostoma*) Mexico p. 97 figs., CARRIKER Bol. Ent. venezol. **3.**

Passonomedea **gen. n.** p. 79, *hopkinsi* **sp. n.** (on *Odontophorus c. capueira*) Brazil p. 81 figs., CARRIKER t.c.

Pectenosoma verrucosa key to subspp. p. 203; *v.* **subspp. n.** *yapurae* (on *Crypturellus undulatus yapurae*) Peru, *tinami* (on *Tinamus major percautus*), *boucardi* (on *C. b. boucardi*), *meserythra* (on *C. soui meserythrus*), *cinnamomea* (on *C. cinnamomeus sallaei*) Mexico, *punensis* (on *C. obsoletus*) Bolivia p. 204, *nigriceps* (on *C. soui nigriceps*), *inconspicua* (on *C. s. inconspicuus*) Peru p. 206 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Pectinopygus dispar Piag. (= *distinctum* Harr.) p. 225 (note), HOPKINS Ann. Mag. n. H. (11) **11.**

Physconelloides Ewing (= *Goniocotacanthus* Guim.); *ceratoceps* Ew. (= *mattogrossensis* Guim.) p. 57, STAFFORD Bol. Ent. venezol. **2** 1943.

Procavicola (*P.*) *vicinus* a good sp. p. 409; notes on hosts of some other spp. p. 410, HOPKINS Rev. brasil. Biol. **4.**

Pseudolipeurus longipes **subspp. n.** *similis* (on *Crypturellus b. boucardi*), *robustus* (on *Tinamus major*) Mexico p. 91, *garleppi* (on *C. garleppi affinis*) Bolivia, *carrikeri* (HOPKINS) (on *C. obsoletus punensis*) Bolivia, Peru p. 93; *taoi* **subsp. n.** *peruvianus* (on *T. tao kleei*) Peru p. 95; *tinami* **subspp. n.** *serratae* (on *T. s. serratus*) Bolivia p. 97, *ruficeps* (on *T. s. ruficeps*); *sanctaemartae* (on *C. idoneus*) p. 98 Colombia, *tataupicola* (on *C. t. tataupa*) Bolivia p. 100 **spp. n.** figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Pseudophilopterus hirsutus **subsp. n.** *similis* (on *Crypturellus cinnamomeus*) Mexico p. 103 figs., CARRIKER t.c.

Pterocotes aberrans **subspp. n.** *mexicanus* (on *Tinamus major percautus*) Mexico p. 196, *colombianus* (on *T. serratus ruficeps*) Colombia p. 198; *taoi* Carr. raised to sp. p. 199 figs., CARRIKER t.c.—*P.* revision pp. 19–37 figs., GUIMARÃES Papéis avulsos Dep. Zool. S. Paulo **3** 1943.

Quadraceps semifissa **subspp. n.** *mexicana* (on *Himantopus mexicanus*) Mexico p. 99, *andina* (on *Recurvirostra andina*) Bolivia p. 101 figs., CARRIKER Bol. Ent. venezol. **3.**

Rhopaloceras heterogenitalis **sp. n.** (on *Crypturellus b. boucardi*) Mexico p. 136 (with **subsp. n.** *spatulata* (on *C. idoneus*) Colombia p. 138); *laticeps* **subsp. n.** *bonaparti* (on *Nothocercus bonaparti*) p. 139 Colombia figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Rhyncothura minuta **subsp. n.** *boliviana* (on *Nothura maculosa oruro*) p. 167; *heterura* (on *Nothoprocta cinerascens*), *subteres* (on *N. p. pentlandi*) p. 169, *chacoensis* (on *N. cinerascens*) p. 171, *andinae* (on *Tinamotis pentlandi*) p. 173 **spp. n.** Bolivia; *testudo* Clay from *Heptapsogaster* p. 174 figs., CARRIKER t.c.—*R. carrikeri* see *Heteropeostus.*

Splendoroffula forcipata Piag. from *Lipeurus* p. 224, HOPKINS Ann. Mag. n. H. (11) **11.**

Strongylocotes complanatus **subspp. n.** *intermedius* (on *Crypturellus obsoletus ochraceiventris*) Peru p. 104, *boucardi* (on *C. b. boucardi*) Mexico p. 107; *subconiceps* **subsp. n.** *perijae* (on *C. soui*) Colombia p. 111; *spinosus* **subspp. n.** *peruvianus* (on *Nothocercus nigrocapillus*) Peru, *bonaparti* (on *N. bonaparti*) Colombia p. 113; *angulocapitis* (♂ p. 115) **subspp. n.** *weddelli* (on *T. tao weddelli*) Bolivia, *taoi* (on *Tinamus t. tao*) p. 116, *ruficeps* (on *T. major ruficeps*) p. 118 Colombia; *pellucidifrons* **sp. n.** (on *T. m. percautus*) Mexico; *wernecki* Guim. & Lane (= *latithorax* Kéler) p. 119; *lipogonus* **subsp. n.** *alticola* (on *Rhynchotus rufescens maculicollis*) Bolivia p. 121 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Syrrhaptoecus alchatae, bedfordi, paradoxus synonymy discussed pp. 227–229, HOPKINS Ann. Mag. n. H. (11) **11.**

Tinamotaecola **gen. n.** (Philopter idae) p. 86, *andinae* **sp. n.** (on *Tinamotis pentlandi*) Bolivia p. 87 figs., CARRIKER Proc. U.S. nat. Mus. **95** no. 3180.

Trichodopeostus spinosus **subsp. n.** *praegracilis* (on *Nothocercus bonaparti*) Colombia p. 174, CARRIKER t.c.

Trimenopon jenningsi characters of head pp. 177–226 figs., STÖWE Zool. Jb., Anat., **68** 1943 [not seen .

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Psocathropos Ribaga (= *Gambrella* End.) p. 35, MENON Indian J. Ent. **4** 1942.

Psyllipsocus bombayensis p. 38, *edentulus* p. 40 **spp. n.** India figs., MENON t.c.—*P. troglodytes* morphology, status discussed p. 9, BADONNEL Bull. Soc. ent. Fr. **48** 1943.

Psylloneura williamsi see *Tapinella.*

Psyllotroctes see *Pachytroctes.*

Sphaeropsocidae **fam. n.** p. 24, MENON Indian J. Ent. **4** 1942.

Tapinella williamsi Banks from *Psylloneura* p. 31; *formosana* redescription p. 32 figs., MENON t.c.

PSOCOPTERA.

Studies on Indian Copeognatha, MENON Indian J. Ent. **3** 1941 pp. 13–23, 10 figs.; **4** 1942 pp. 23–42, 38 figs.

Amapsocus **n. n.** for *Pseudopsocus* Chapman nec Kolbe p. 359, SOMMERMAN Ann. ent. Soc. Amer. **37.**

Ectopsocus pumilis egg p. 57, SOMMERMAN Psyche **50** 1943.

Elipsocus sticticus see *Philotarsus.*

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Gambrella see *Psocathropos.*

Lichenomima argentina **sp. n.** Argentina p. 159 figs., WILLINER An. Soc. cient. argent. **138.**

Liposcelis list of spp. p. 45; *granicola* **sp. n.** England p. 47 figs., BROADHEAD & HOBBY Ent. mon. Mag. **80.**

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Philotarsus sticticus Nav. from *Elipsocus* p. 41 figs., WILLINER Rev. argent. Ent. **2** no. 4.

Pseudopsocus see *Amapsocus.*

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Key to termites of Florida, EMERSON & MILLER Proc. Florida Acad. Sci. **6** pp. 108–109.

Identification of termites of New Zealand, KELSEY N.Z. J. Sci. Tech. (B) **25** pp. 231–260, 29 figs.

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Calotermes (*C.*) *curvithorax* **sp. n.** Canton I. p. 47 figs., KELSEY N.Z. J. Sci. Tech. (B) **25.**

Neotermes castaneus Burm. (= *angustoculus* Snyder) p. 103, MILLER E. M. & D. B. Proc. Fla Acad. Sci. **6** (1943); EMERSON & MILLER E. M. t.c. p. 108 (note).

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Anisembia Krauss restriction, key to subgenn. and spp. p. 445 ; (*A.*) *venosa* Banks (= *schwarzi* Ross) p. 446 figs., Ross Proc. U.S. nat. Mus. **94** no. 3157.—*A. davisi, wheeleri, heymonsi, rubra* see *Chelicerca.*

Calamoclostes gurneyi **sp. n.** Colombia p. 415 figs., Ross Proc. U.S. nat. Mus. **94** no. 3175.

Chelicerca Ross raised to gen. p. 448, key to spp., (*Protochelicerca* **subgen. n.**) p. 449 ; (*P.*) *dampfi* p. 450, (*C.*) *nodulosa* **spp. n.** Mexico ; (*C.*) *davisi* Ross p. 451, (*C.*) *wheeleri* Mel. p. 452, (*C.*) *heymonsi* End., (*Dactylocerca*) *rubra* Ross p. 454 from *Anisembia* figs., Ross t.c.

Clothoda intermedia Davis a subsp. of *urichi* Sauss. p. 408 figs., Ross t.c.

Dilobocerca **subgen. n.** (type *lobata* sp. n.) see *Oligembia.*

Embia birabeni see *Pararhagadochir.*

Embolyntha salvini see *Neorhagadochir.*

Idioembia **gen. n.** for *Oligembia banski* Davis p. 455 ; *producta* **sp. n.** Brazil p. 456 ; *argentina* Nav. from *Pararhagadochir* p. 458 figs., Ross Proc. U.S. nat. Mus. **94** no. 3175.

Mesembia aequalis **sp. n.** Brazil p. 438 figs., Ross t.c.

Metembia flava **sp. n.** S. India p. 100 figs., Ross Psyche **50** 1943.

Metoligotoma nodosa **sp. n.** Queensland p. 19 figs., Davis Proc. Linn. Soc. N.S.W. **69.**

Microembia **gen. n.** p. 416, *rugosifrons* **sp. n.** Peru p. 417 figs., Ross Proc. U.S. nat. Mus. **94** no. 3175.

Neorhagadochir **gen. n.** p. 418, *inflata* **sp. n.** (type) Guatemala ; *salvini* McL. from *Embolyntha* p. 419 figs., Ross t.c.

Oligembia Davis re-description p. 459, keys to groups and spp. pp. 461, 477 ; (*Dilobocerca* **subgen. n.** p. 476) ; (*O.*) *buscki* Panama,. Guatemala p. 464, (*O.*) *peruviana* Peru p. 465, (*O.*) *darlingtoni* Dominican Republic p. 467, (*O.*) *bicolor* p. 468, (*O.*) *unicolor* p. 469, (*Dilobocerca*) *plaumanni* p. 487 Brazil, (*O.*) *melanura* p. 470, (*D.*) *lobata* p. 477 Texas, (*O.*) *armata* Trinidad p. 474, (*D.*) *jalapae* p. 480, (*D.*) *chiapae* p. 481, (*D.*) *emarginata* p. 483 Mexico, (*D.*) *excisa* California p. 482, (*D.*) *gigantea* Venezuela p. 485, (*D.*) *nigrina* New Jersey p. 486, (*D.*) *vandykei* Florida, S. Carolina p. 488, (*D.*) *caribbeana* Cuba p. 492 **spp. n.** figs., Ross t.c.—*O. banksi* see *Idioembia.*

Oligotoma borneensis Hag. discussed, lectotype described p. 102 ; *falcis* **sp. n.** S. India p. 106 ; key to spp. of *saundersii* group p. 107 figs., Ross Psyche **50** 1943.—*O. gurneyi* **subsp. n.** *remota* N.W. Australia p. 16 ; *g.* variation in subspp. p. 18 figs., Davis Proc. Linn. Soc. N.S.W. **69.**

Pararhagadochir key to New World spp. p. 421 ; *flavicollis* End. a subsp. of *trinitatis* Sauss. ; *trachelia* Nav. further description p. 424 ; *schadei* p. 427, *confusa* p. 428 Paraguay, Argentina, *davisi* Brazil p. 432, *surinamensis* Surinam p. 433 **spp. n.** ; *birabeni* Nav. from *Embia* p. 430 figs., Ross Proc. U.S. nat. Mus. **94** no. 3175.—*P. argentina* see *Idioembia.*

Protochelicerca **subgen. n.** (type *dampfi* sp. n.) see *Chelicerca.*

Saussurembia symmetrica **sp. n.** Colombia p. 436 figs., Ross Proc. U.S. nat. Mus. **94** no. 3175.

Schizembia **gen. n.** p. 440, *grandis* (type) Venezuela, Colombia p. 441, *minuta* Colombia p. 443, *callani* Trinidad p. 444, **spp. n.** figs., Ross t.c.

PLECOPTERA.

Plecoptera in the Dale collection, Kimmins Ent. mon. Mag. **80** pp. 273–278.

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Stoneflies of south-western Br. Columbia, Ricker Ind. Univ. Publ. Sci. Ser. no. 12 1943 145 pp. 129 figs.

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Allocapnia nivicola Fitch a valid sp. p. 157, HANSON Bull. Brooklyn ent. Soc. **38** (1943).

Alloperla (*Sweltsa* p. 135, *Suwallia* p. 139, *Neaviperla* p. 141 **subgenn. n.**) figs., RICKER Ind. Univ. Publ. Sci. Ser. no. 12 1943.

Arcynopteryx (*Skwala* p. 113, *Frisonia* p. 117 **subgenn. n.**); *parallela* Fris. (= *americana* N. & C.) p. 113; (*F.*) *walkeri* **sp. n.** Br. Columbia p. 118 figs., RICKER t.c.—*A.* (*A.*) *americana* Klap. (= *minor* Klap.) p. 183, RICKER Canad. Ent. **76**.

Capnia nearctica Bks., *hantzschi* Rick. characters p. 178, RICKER t.c.—*C. wanica* p. 151, *barbata* p. 153, *limata* p. 155, **spp. n.** Colorado figs., FRISON Trans. Amer. ent. Soc. **69**.—*C. fumigata* see *Isocapnia grandis*.

Despaxia **subgen. n.** (type *glabra* Claassen) see *Leuctra*.

Dictyopterygella postica Wlk. (= *hudsonica* Hanson) p. 178, ♀ p. 179, RICKER Canad. Ent. **76**.

Diploperla decisa Wlk. (= *Perla verticalis* Banks) p. 179 fig., RICKER t.c.—*D. fraseri* **sp. n.** Br. Columbia p. 106 figs., RICKER Ind. Univ. Publ. Sci. Ser. no. 12 1943.

Eucapnopsis vedderensis **sp. n.** Br. Columbia p. 86 figs., RICKER t.c.

Frisonia **subgen. n.** (type *walkeri* sp. n.) see *Arcynopteryx*.

Isocapnia grandis Banks (= *fumigata* Claassen) p. 89; *agassizi* p. 90, *spenceri* p. 91 (with **var. n.** *thujae* p. 92) **spp. n.** Br. Columbia figs., RICKER Ind. Univ. Publ. Sci. Ser. no. 12 1943.—*I. grandis* Banks (= *fumosa* Banks, *Capnia fumigata* Claassen) p. 158; *integra* **sp. n.** Alberta p. 160 figs., HANSON Bull. Brooklyn ent. Soc. **38** (1943).

Isogenoides frontalis Newm. (= *hudsonicus* Hanson) p. 181, RICKER Canad. Ent. **76**.

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Heteromurus nitidus Templeton (= *Pseudosinella kemneri* Agrell) in pp. 1–130, GISIN Verh. naturf. Ges. Basel **55** 1943 [not seen]; also in Mitt. schweiz. ent. Ges. **19** p. 154.

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Onychiurus tomuraushensis Yosii from *Tullbergia* p. 53, BONET Rev. Soc. mexicana H. n. **5.**—*O. burmeisteri* Lubb. (= *tuberculatus* Moniez) p. 133 fig., GISIN Mitt. schweiz. ent. Ges. **19.**

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Proisotoma americana Denis (= *Folsomides stachi* Folsom); *minuta* Tullb. (= *Isotoma stagnalis* Willem and var. *tenebricola* Willem) in pp. 1–130, GISIN Verh. naturf. Ges. Basel **55** 1943 [not seen], also in Mitt. schweiz. ent. Ges. **19** p. 154.—*P. parvula* Stach (= *Folsomides parvus* Fols.); *ågreni* C.B. (= *similis* James, *decemoculata* Fols. nec Stscherbakow) p. 147; *bipunctata* Axels. p. 148, *coeruleogrisea* Hammer p. 149 from *Isotoma*, GISIN Mitt. schweiz. ent. Ges. **19.**—*P. centralis* redescription p. 19, BONET Ciencia **5.**

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Stenaphorura absoloni, *axelsoni*, *lubbocki* see *Tullbergia quadrispina*.

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Tetracanthella pérezi **sp. n.** France p. 150 fig., DELAMARE-DEBOUTTEVILLE Bull. Soc. ent. Fr. **48** (1943).

Tomocerus terrestralis Stach (= *gradjackae* Denis); *baudoti* Denis (= *minutus* Skor., Handsch. nec Tullb.); *flavescens* Tullb. (= *lubbocki* Schäff.) in pp. 1–130, GISIN Verh. naturf. Ges. Basel **55** 1943 [not seen]; also in Mitt. schweiz. ent. Ges. **19** p. 154.

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Womersleyella **gen. n.** (Isotomidae), *niveata* **sp. n.** New Zealand p. 142 figs., SALMON t.c.

Xenylla maritima Tullbg. (= *nitida* Tullbg., *pseudomaritima* James, *corticalis* Börn., *proxima* Denis, *brevicauda* auct. div.) p. 129 ; *grisea* Axels. (= *cavarai* Caroli, *cavernarum* Jackson) p. 130 figs., GISIN Mitt. schweiz. ent. Ges. **19**.

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Swedish Thysanura, AGRELL Opusc. ent. Lund **9** pp. 23–36, 2 figs.

Contribution to the knowledge of Diplura and Thysanura of Switzerland, WYGODZINSKY Denkschr. schweiz. naturf. Ges. **74** 1941 pp. 113–227, 10 pls. 3 figs.

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Campodea key to spp. p. 124, (*C.*) *basiliensis* p. 127, (*C.*) *silvicola* p. 130, (*Monocampa*) *denisi* p. 131, **spp. n.** Switzerland figs., WYGODZINSKY Denkschr. schweiz. naturf. Ges. **74** 1941.—*C.* (*C.*) *minor* p. 503, (*C.*) *arrabidae* p. 504, (*Dicampa*) *lusitana* p. 506, (*Podocampa*) *jorgei* p. 508, (*P.*) *seabrai* p. 510, **spp. n.** Portugal figs., WYGODZINSKY Rev. brasil. Biol. **4**.

Coryphophtalmus see *Triqoniophtalmus*.

Dilta lundbladi **sp. n.** Madeira p. 1 fig., AGRELL Ark. Zool. **35B** no. 1.—*D. suecica* **sp. n.** Sweden p. 25 figs., AGRELL Opusc. ent. Lund **9**.—*D.* key to spp. ; *hybernica* Carp. (= *Teutonia germanica* Verh., *T. oudemansi* Verh., *Praemachilis saxicola* Wom.) p. 147 ; *littoralis* Wom. (= *P. thornleyi* Wom.) p. 149 figs., WYGODZINSKY Denkschr. schweiz. naturf. Ges. **74** 1941.

Eutrichocampa helvetica **sp. n.** Switzerland p. 123 figs., WYGODZINSKY t.c.—*E. birabeni* **sp. n.** Argentina p. 141 ; key to spp. p. 144 figs., WYGODZINSKY Notas Mus. La Plata **8** (Zool.) 1943.

Forbicina (*Teutonia*) *germanica* new to Sweden p. 115, TUXEN Opusc. ent. Lund **7** 1942.

Hypomachilodes mexicanus **sp. n.** Mexico p. 84 figs., WYGODZINSKY Rev. Ent. Rio de J. **15**.

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Machilinus neotropicalis p. 89, *birabéni* p. 91, **spp. n.** Argentina figs., WYGODZINSKY t.c.

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Machiloides bruchi **sp. n.** Argentina p. 93 figs., WYGODZINSKY Rev. Ent. Rio de J. **15**.

Petrobius brevistylis Carp. (= *balticus* Stach); *lohmanderi* **sp. n.** Sweden p. 31 figs., AGRELL Opusc. ent. Lund **9**.

Praemachilis saxicola see *Dilta hybernica*; *thornleyi* see *D. littoralis*.

Teutonia germanica, oudemansi see *Dilta hybernica*.

Trigoniophtalmus Verh. (= *Coryphophtalmus* Verh.) p. 150, key to spp. p. 152; *alternatus* **var. n.** *diversiphtalmus* Switzerland p. 153 figs., WYGODZINSKY Denkschr. schweiz. naturf. Ges. **74** 1941.

PROTURA.

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Permochorista mirabilis p. 135, *kargalensis* p. 137, *ingloria* p. 138, **spp. n.** Permian, Kargala, S. Urals figs., MARTUINOVA t.c.

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ERRATA.

Vol. lxvii, 1930, p. 61, Nos. **1291**, **1292**, **1293**; p. 103, No. **2269**; p. 223, col. 2, lines 16 and 21; p. 243, col. 1, lines 36 and 42; p. 368, col. 2, 4 lines from end and p. 369, col. 1, line 9, for "**35**" read "**36**"

Vol. lxvii, 1930, p. 66, No. **1409** and p. 395, col. 1, 11 lines from end, for "Tech. Bull. . . . **213** 1930" read "Bull. . . . **212** 1929"

Vol. lxvii, 1930, p. 369, col. 1, line 8, for "p. 126" read "p. 136"

Vol. lxvii, 1930, p. 369, col. 2, line 31, insert "**36**" after p. 139

Vol. lxvii, 1930, p. 403, col. 1, 13 lines from end, after "**34**" insert "1930"

Vol. lxix, 1932, p. 14, No. **121a** and p. 408, col. 2, line 28, for "**21**" read "**23**"

Vol. lxxii, 1935, p. 431, col. 2, "transfer *Cycloptilum* to GRYLLIDAE"

Vol. lxxiii, 1936, p. 420, col. 1, for "*Meganinus*" read "*Megaginus*"

Vol. lxxv, 1938, p. 310, col. 1, transfer "*Cinara*" to APHIDAE (Hemiptera)

Vol. lxxv, 1938, p. 394, col. 1, line 25, for "Melichar nec Stål" read "*quadripunctata* F. (type), *Flata pruinosa* Say, *F. regularis* Fowl."

Vol. lxxvi, 1939, p. 337, col. 1, 5 lines from end, for "*Latoria*" read "*Latoia*"

Vol. lxxvi, 1939, p. 349, col. 1, 7 lines from end, for "Canary Is." read "Palestine"

Vol. lxxix, 1942, p. 59, No. **1124**, for "**Prahan**" read "**Pradhan**"

Vol. lxxix, 1942, p. 109, col. 1, lines 11 and 12, for "pp. 196–198" read "p. 196" and for "**7** 1940" read "**8** 1941"

Vol. lxxix, 1942, p. 163, col. 1, lines 9 and 16, for "*Palpomyia*" read "*Jenkinshelea*"

Vol. lxxx, 1943, p. 48, No. **822** and p. 136, col. 2, lines 11 and 12, after "agron.," insert "Recife" and for "**3** 1941" read "**3** (1941) 1942"

Vol. lxxx, 1943, p. 155, col. 1, line 18, for "*vesena*" read "*vesana*" and line 25 for "*trigrina*" read "*tigrina*"

Vol. lxxx, 1943, p. 226, col. 1, lines 1 and 2, for "[? p.]" and "**7**" read "p. 148" and "**8**"

Vol. lxxx, 1943, p. 231, col. 1, line 23, add "*—P.* Carpenter see *Sinelloides*."; col. 2, line 3, delete "*P. adamsoni* see *Sinelloides*"; line 19, for "*Sinelloides* **gen. n.** for *Pseudosinella adamsoni* Carp. (type)" read "*Sinelloides* **n. n.** for *Parasinella* Carp. nec Bonet;"

14. PROTOCHORDATA

INCLUDING

ENTEROPNEUSTA AND PTEROBRANCHIA

BY

M. BURTON, D.Sc.

I.—TITLES

1.—Opinion 1. The meaning of the word "indication" in proviso (*a*) to Article 25 of the International Code, as respects names published on, or before, 31st December, 1930. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 10 1944 pp. 73–86.

2.—Opinion 2. The nature of a systematic name. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 11 1944 pp. 87–94.

3.—Opinion 3. The status of publications dated 1758. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 12 1944 pp. 95–102.

4.—Opinion 4. The status of names published as manuscript names. Opinions and Declarations Internat. Comm. Zool. Nomencl. London **1** 13 1944 pp. 103–114.

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9.—**Bertholf,** L. M. and **Mast,** S. O. Metamorphosis in the larva of the Tunicate, *Styela partita*. Biol. Bull. Woods Hole **87** (2) 1944 p. 166.

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14.—**Johansson,** K. E. *Lamellisabella zachsi* Uschakow, ein Vertreter einer neuen Tierklasse Pogonophora. Zool. Bidr. Uppsala **18** 1939 pp. 253–268 1 pl. 7 text-figs.

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16.—**Leloup,** E. and **Miller,** O. La flore et la faune du Bassin de Chasse d'Ostende. Mém. Mus. Hist. nat. Belg. **94** 1940 [Protochordates pp. 81–82].

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E. TREWAVAS, D.Sc. (recent)
and E. I. WHITE, D.Sc. (fossil)

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16. AMPHIBIA AND REPTILIA.

ARRANGED BY

MALCOLM A. SMITH.

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17. AVES

ARRANGED BY

Lt.-Col. W. P. C. TENISON, D.S.O.

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†*Pitymys meadensis* **sp. n.** Pleistocene Kansas, HIBBARD Bull. Geol. Soc. Amer. Washington D.C. **55** 1944 p. 729 fig.

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†*Nesiotites* **gen. n.** p. 741 for genotype *N. hidalgo* **sp. n.** Pleistocene Cap Faruch, E. Mallorca p. 742, *N. corsicanus* **sp. n.** Pleistocene Corsica p. 748 figs., BATE Ann. Mag. Nat. Hist. **11** 1944.

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†*Sorex cudahyensis* **sp. n.** Pleistocene Kansas, HIBBARD Bull. Geol. Soc. Amer. Washington D.C. **55** 1944 p. 720 fig.

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